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ABSTRACT

Economic trends in the 1960's in the Iowa rural renewal area, Appanoose and Monroe counties, show that the level of economic activity increased in the area but was clearly below the level for the state. Economic trends suggest that to provide economic opportunities in the area, by 1980, comparable to those available on the average to all residents of Iowa, the annual rate of growth in the area in the 1970's must be double the rate of the 1960's. New approaches are required to double the annual rate of growth. These include (1) increases in employment in the manufacturing sectors not related to agriculture, and (2) comprehensive planning at the multicounty level. These plans should include ways to expand employment and improve such facilities and services as housing, water supplies, sewage-disposal facilities, and medical and educational services. (Author/AL)

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AN ECONOMIC ANALYSIS OF THE IOWA RURAL RENEWAL AREA

Economic Research Service •
U.S. Department of Agriculture •

ABSTRACT

Economic trends in the 1960's in the Iowa rural renewal area, Appanoose and Monroe Counties, show that the level of economic activity increased in the area but was clearly below the level for the State. Economic trends suggest that to provide economic opportunities in the area, by 1980, comparable to those available, on the average, to all residents of Iowa, the annual rate of growth in the area in the 1970's must be double the rate of the 1960's. New approaches are required to double the annual rate of growth. These include: (1) increases in employment in the manufacturing sectors not related to agriculture, and (2) comprehensive planning at the multicounty level. These plans should include ways to expand employment and improve such facilities and services as housing, water supplies, sewage disposal facilities, and medical and educational services.

Key Words: Iowa rural renewal area, multicounty area, comprehensive planning, index of economic activity, factor analysis.

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PREFACE

This study was made to aid the Farmers Home Administration in planning a rural development program for Appanoose and Monroe Counties, Iowa. It was carried out in accordance with a 1964 memorandum of understanding between the Economic Research Service and the Farmers Home Administration.

This study was a staff effort of the Regional Programs Group, Area Analysis Branch, Economic Development Division, prepared under the direction of Robert I. Coltrane, Leader, Regional Programs Group.

CONTENTS

	Page
HIGHLIGHTS AND IMPLICATIONS FOR DEVELOPMENT PLANNING	v
INTRODUCTION	1
ECONOMIC AND SOCIAL TRENDS, 1950 TO 1967	3
Population	3
Employment	4
Industry Structure	7
Economic Status of Population	8
Community Facilities and Services	11
Tax Revenue	14
INDEX OF ECONOMIC ACTIVITY	14

FIGURES

Number		
1.	Iowa rural renewal area	2
2.	Employment, Iowa rural renewal area, 1960-67	5
3.	Percentage employed in agriculture, Iowa rural renewal area and Iowa, 1960-67	5
4.	Index of economic activity per capita, 1960-67	17
5.	Index of economic activity per capita-difference between Iowa and the Iowa rural renewal area, 1960-67	17
6.	Index of total economic activity, 1960-67	18

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TABLES

Number		Page
1.	Population change in the Iowa rural renewal area, Iowa, and the United States, 1950-66	19
2.	Households and persons per household in the Iowa rural renewal area and Iowa, 1960-67	20
3.	Employment and unemployment in the Iowa rural renewal area, Iowa, and the United States, 1950 and 1960	21
4.	Civilian labor force of the Iowa rural renewal area, 1960-67	22
5.	Civilian labor force of Appanoose County, Iowa, 1960-67	23
6.	Civilian labor force of Monroe County, Iowa, 1960-67	24
7.	Civilian labor force of Iowa, 1960-67	25
8.	Residents' place of work, Appanoose and Monroe Counties, Iowa, 1960.	26
9.	Selected characteristics of farms in the Iowa rural renewal area, Iowa, and the United States, 1959 and 1964	27
10.	Gross farm income, Iowa rural renewal area and Iowa, 1960-67	28
11.	Manufacturing plants, by employment size, Appanoose and Monroe Counties, Iowa, 1963	29
12.	Retail sales, Iowa rural renewal area and Iowa, 1960-67	30
13.	Selected retail sales characteristics, Iowa rural renewal area, 1960-67	31
14.	Rural/urban distribution of the population, Iowa rural renewal area, Iowa, and the United States, 1950 and 1960	32
15.	Rural/urban distribution of the population, Iowa rural renewal area and Iowa, 1960-67	33
16.	Families by 1959 income and by residence, Iowa rural renewal area, 1960	34
17.	Families by 1959 income and by residence, Iowa, 1960	35
18.	Families by 1959 income and by residence, United States, 1960	36
19.	Effective buying income, Iowa rural renewal area and Iowa, 1960-67.	37
20.	Effective buying income per capita, Iowa rural renewal area and Iowa, 1960-67	38

		Page
21.	Effective buying income per household, Iowa rural renewal area and Iowa, 1960-67	39
22.	Personal income by major sources and earnings by broad industrial sector, Appanoose County, Iowa, selected years, 1929-67	40
23.	Personal income by major sources and earnings by broad industrial sector, Monroe County, Iowa, selected years, 1929-67	41
24.	Total bank deposits, Iowa rural renewal area and Iowa, 1960-67	42
25.	Per capita bank deposits, Iowa rural renewal area and Iowa, 1960-67	43
26.	Selected housing characteristics, Iowa rural renewal area and Iowa, 1960	44
27.	Source of water supply for housing, Iowa rural renewal area and Iowa, 1960	45
28.	Sewage disposal for housing, Iowa rural renewal area and Iowa 1960	46
29.	Population per physician, 1967, and population per dentist, 1966, Iowa rural renewal area and Iowa	47
30.	Distribution of total direct general expenditures by local governments, Iowa rural renewal area and Iowa, 1962	48
31.	Distribution of per capita direct general expenditures by local governments, Iowa rural renewal area and Iowa, 1962	49
32.	Total and per capita retail sales tax paid, Iowa rural renewal area and Iowa, 1960-67	50
33.	Total and per capita State income tax paid, Iowa rural renewal area and Iowa, 1960-67	51
34.	Total and per capita use tax paid, Iowa rural renewal area and Iowa, 1960-67	51
35.	Level of economic activity per capita, selected variables, Iowa rural renewal area, 1960-67	52
36.	Level of economic activity per capita, selected variables, Iowa, 1960-67	53
37.	Indexes of economic activity, Iowa rural renewal area and Iowa, 1960-67	54

HIGHLIGHTS AND IMPLICATIONS FOR DEVELOPMENT PLANNING

The level of economic activity in the Iowa rural renewal area, Appanoose and Monroe Counties, rose in the 1960's, but was clearly below that of the rest of Iowa and the Nation. A diminishing demand for labor in agriculture--historically the main user of labor in the rural renewal area--and the failure of many workers to find satisfactory employment in other industry sectors has influenced substantial numbers of people to migrate from the two counties in search of better employment opportunities. Gains in nonfarm employment, especially in manufacturing in Appanoose County, have been impressive, but have failed to offset losses in farm employment. Income levels in the two counties are below those for the State, and the disparity has increased in recent years.

This study of the rural renewal area culminates with a factor analysis of selected economic variables, from which an index was constructed that estimates the overall trend in economic growth in the area in the 1960's. The index also establishes the level of economic activity in the two counties relative to the level in the State. This index offers the following working guideline to those concerned with the economic development of the two depressed southern Iowa counties: To provide economic opportunities in the area comparable, by 1980, to those available, on the average, to all Iowans, the annual rate of economic growth in the 1970's must be double the rate of the 1960's.

Doubling the area's rate of growth in the 1970's calls for major new comprehensive approaches. The most promising ones suggested by the analysis are: (1) To place greater emphasis on expanding nonfarm industry, particularly sectors of nonfarm industry not related to agriculture; and (2) to use a multicounty approach both to develop programs to stimulate employment growth and to upgrade community services and facilities. Community services and facilities that need improvement are housing, water supplies, sewage disposal facilities, and medical and educational services. The multicounty area would include key centers such as Ottumwa, in adjacent Wapello County.

The increases in economic activity in the rural renewal area failed to keep pace with changes in Iowa during the period when Iowa's economy expanded at an accelerated rate. Although the area was unable to close the gap in the level of economic activity in 1960-65, it was able to maintain its position relative to Iowa's. In 1966-67, however, when growth at the State level quickened, the rural renewal area failed to respond accordingly. Apparently, the structure of the area's nonfarm sector is such that it does not respond much to increases in income at the State and national levels. The manufacturing sector is heavily weighted with small firms producing products related to agricultural production and products for consumption by the local population. The demand elasticities for products related to agricultural production are usually lower than average for nonfarm products. The result is that as income increases at the State and national levels, the change in demand for many rural renewal area products is less than for most nonfarm products produced elsewhere. A more favorable industry mix would enhance activity in the local economy.

The multicounty nature of economic activities and problems in Appanoose and Monroe Counties has important implications for local planners and program leaders. Certain problems are not unique or confined to one county but often involve several adjacent counties. Frequently, a key to ameliorating problems in outlying counties is the upgrading of facilities and services provided by towns and cities in a multicounty area. Residents of outlying areas will benefit when their access to such facilities and services is improved.

Some interdependencies between the two rural renewal counties and adjacent counties for specific types of activity are mentioned in this report, and it is pointed out that many residents commute to jobs in nearby counties. Ottumwa, in adjacent Wapello County, is the major employment center. That the rural renewal area is only a part of a labor market area should be considered in developing programs to stimulate employment growth, including education and job training programs. Hospital and other medical facilities, including the regional public health center, which provide medical services to area residents are located at Ottumwa.

In 1967, the percentage of total area employment in trades and services (retail and wholesale trade, and business- and consumer-type services) was less than the percentage for trade and service workers in the State. Apparently, local residents and firms depend on distant urban centers to supplement the incomplete array of consumer and business services available in Centerville and Albia. The data show that the percentage employed in trades and services in Wapello County was higher than in the rural renewal area.

Ottumwa apparently provides essential jobs and services to area residents. Changes occurring there are important to the rural renewal area and should be considered in developing comprehensive plans for Appanoose and Monroe Counties.

AN ECONOMIC ANALYSIS OF THE IOWA RURAL RENEWAL AREA

by

Area Analysis Branch
Economic Development Division
Economic Research Service

INTRODUCTION

The Iowa rural renewal area was designated by the U.S. Department of Agriculture as eligible to receive both technical assistance and loans for planning, developing, and carrying out rural renewal programs. The purpose of this report is to describe the economic situation and trends in the area in the 1950's and 1960's. To provide for the preliminary needs of planners, this report (1) summarizes economic and social conditions in the rural renewal area, and (2) points to various characteristics of the area's economy that need to be considered by planners if the area is to realize its full growth potential.

Economic and social data are first presented for individual indicators. This should prove helpful to those interested in specific sectors of the area's economy. An array of selected variables is then reduced to a composite index that estimates the overall trend in economic growth in the area and also establishes the level of economic activity in the area relative to the level in the State. A factor analysis was used to aggregate the selected variables into a composite index.

Data used in this analysis are included in tables at the end of the report. The tables are included to serve as a reference for persons interested in conducting additional analyses. In this regard, the user should exercise care in comparing data presented in different tables. Many of the data are from different sources and are not strictly comparable. They do, however, show trends in the area's economy that are believed to be valid.

The two counties of the Iowa rural renewal area, Appanoose and Monroe, are located in south central Iowa. Appanoose County has a common boundary with Missouri. Monroe County is north of Appanoose County (fig. 1). The two-county area covers about 958 square miles. The terrain is moderately hilly, comprising some of the least productive farmland in Iowa.

The area's transportation system contains a north-south and east-west oriented primary highway system, a secondary road network, local and interstate trucking and bus services, and rail service. The nearest scheduled airline service is at Ottumwa (Wapello County), population 34,000. Ottumwa is 40 miles

northeast of Centerville, the area's largest town. The north-south primary road system links the area to Des Moines, population 207,000, 90 miles north of Centerville; to Oskaloosa, population 11,500, 45 miles north of Centerville; and with points in Missouri to the south.

Ottumwa provides services for 130,000 persons in a multicounty trade area that includes Appanoose and Monroe Counties. Hence, economic changes in the rural renewal area will not be independent of changes in the larger Ottumwa trade area.

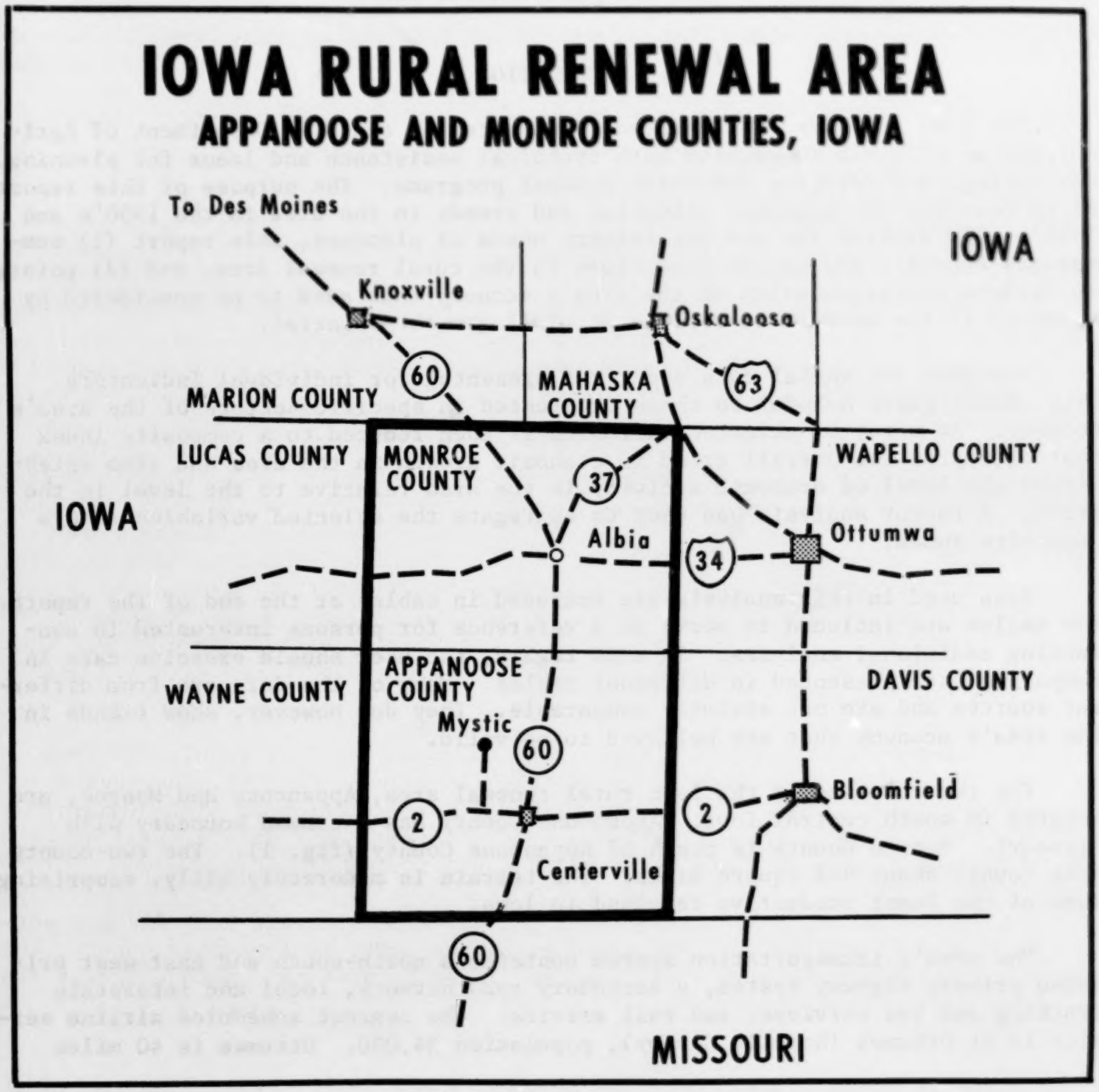

Figure 1

ECONOMIC AND SOCIAL TRENDS, 1950 TO 1967 1/

Economic and social conditions in the rural renewal area, Appanoose and Monroe Counties, are evaluated by comparing them with conditions in the State of Iowa and the United States as a whole. In 1967, Iowa ranked 20th among the States in per capita income, but ranked only 47th in the 1960-67 rate of population growth. Iowa's population remained stable during this period.

The economy of the rural renewal area has been based on agriculture, principally cattle and hog production and field crops. The terrain and fertility of the land have been such that agriculture in the area has been comparatively less productive, and area farmers have earned less income than farmers located to the north in Iowa. As in other parts of Iowa and the United States, agriculture has lost ground to activities related to manufacturing and trade as a source of employment; but the two counties still depend more on agriculture than do most areas. Many people, unable to compete in agriculture and unable to find local nonfarm jobs, have moved from the area.

Population

The rural renewal area's population is currently estimated at about 25,000 and has steadily declined for several years. The population dropped from 31,500 to 26,500 during 1950-60. This decline averaged 1.6 percent a year, compared with average increases of 0.5 percent and 1.8 percent a year for Iowa and the United States, respectively (table 1). Since 1960, population losses have moderated, but have continued. Between 1960 and 1966, the population decline in Monroe and Appanoose Counties averaged 1.1 percent a year, compared with a fractional gain in the State of Iowa. During the 16-year period 1950-66, Monroe, the smaller county, experienced the largest relative decline. Monroe's population declined an average 1.4 percent a year during this period, compared with 1.3 percent in Appanoose County. Each county had net outmigration. Net outmigration for the rural renewal area from 1950 to 1966 was about 28 percent of its 1950 population. The net outmigration rate has moderated since 1960. The average yearly rate from 1950 to 1960 was 2.2 percent, compared with 1.3 percent from 1960 to 1966.

All census-reporting divisions in the two counties lost population from 1950 to 1960. The population of Centerville (Appanoose County), the area's largest town, declined from 7,625 to 6,629. The population of Albia (Monroe County) declined from 4,838 in 1950 to 4,582 in 1960. The area's rural parts lost population at a much greater rate than its towns. 2/

Many data in this report show that the level of economic activity per person in Monroe County in the 1960's was below the level in Appanoose County; but the level per household was about the same in both counties. Both counties are

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1/ Several graphs supporting this discussion are in the text. See tables at end of report that supplement this discussion.

2/ U.S. Census of Population, 1950, 1960.

following the national trend of fewer people per household. In 1960, households in Monroe County averaged about 3.6 persons, compared with about 3.0 in Appanoose County. In 1967, Monroe averaged about 3.1, compared with about 2.9 in Appanoose (table 2). This implies that income accruing to workers in households was distributed among fewer people in Appanoose County than in Monroe County. It does not mean that should the size of families decrease in Monroe County, with the population remaining the same, the population would automatically experience a higher level of economic activity per person. For this to occur, additional jobs would have to be made available for the new working members of the added households. One cannot generalize from these limited data that the level of economic activity per person increases as the size of families decreases. A comparison of Iowa with the rural renewal area shows the inverse. In Iowa as a whole, number of persons per household remained about 3.3 from 1960 to 1967, which was higher than the ratio observed in the rural renewal area; but the level of economic activity per person in Iowa was higher.

Employment

Opportunities for employment during 1960-67 were insufficient to accommodate workers who remained in the area and sought to enter the labor force; neither were there sufficient jobs to accommodate workers desiring to change occupations, especially from farm to nonfarm jobs. Consequently, from 1950 to 1960, total employment declined about 2 percent a year, from 10,739 to 8,578 (table 3). Also, the rate of unemployment increased from 3.2 percent of the civilian labor force in 1950 to 5.0 percent in 1960. The large outflow of people in the working-age group, persons 20 to 40 years old, reflects this lack of job opportunities. The 1950-60 outmigration rate for this age group--which averaged about 4.2 percent a year--was far greater than the rate of natural increase. 3/ Because gains in nonfarm employment in the area between 1960 and 1965 were insufficient to offset losses in farm employment, total employment continued to decline (table 4). In 1966-67, moderate employment gains were observed in Appanoose County, but total employment continued to decline in Monroe County (fig. 2 and tables 5 and 6). 4/

Employment structure.--Shifts in the employment structure in Iowa's rural renewal area followed trends evident throughout the national economy over the past two decades: shifts from less dependence upon agriculture to more reliance on manufacturing, service, and trade sectors. The relative shifts were greater between 1960 and 1967 in the rural renewal area than in the remainder of Iowa (tables 4-7). In 1960, the ratio of agricultural to total employment in the area was about 38 percent; by 1967, the ratio had declined to about 24 percent

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3/ U.S. Census of Population, 1960.

4/ Data are from the Iowa Employment Security Commission, Des Moines. Employment data from this source (used for tables 4-7 and fig. 2) are not comparable to data from the Census of Population. The trends depicted seem to be consistent, however. Census employment data are by place of residence. Iowa Employment Security data are by place of work.

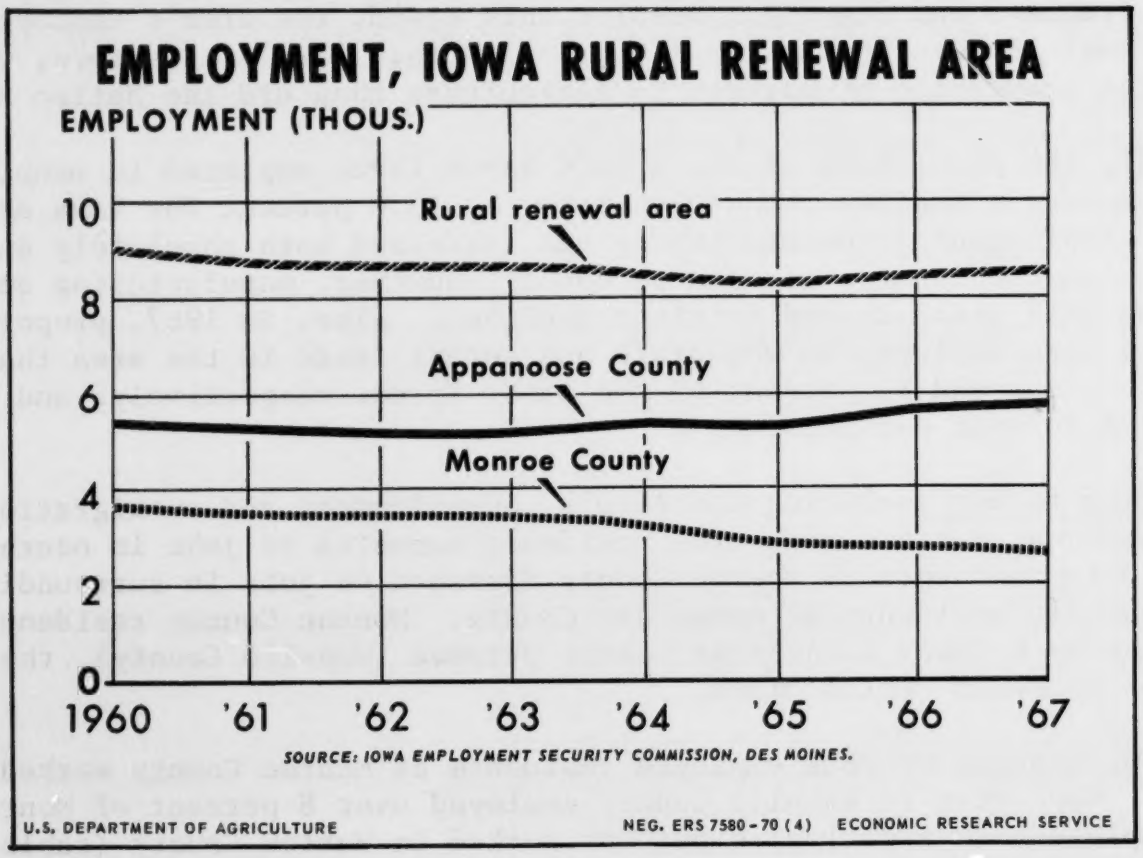

Figure 2

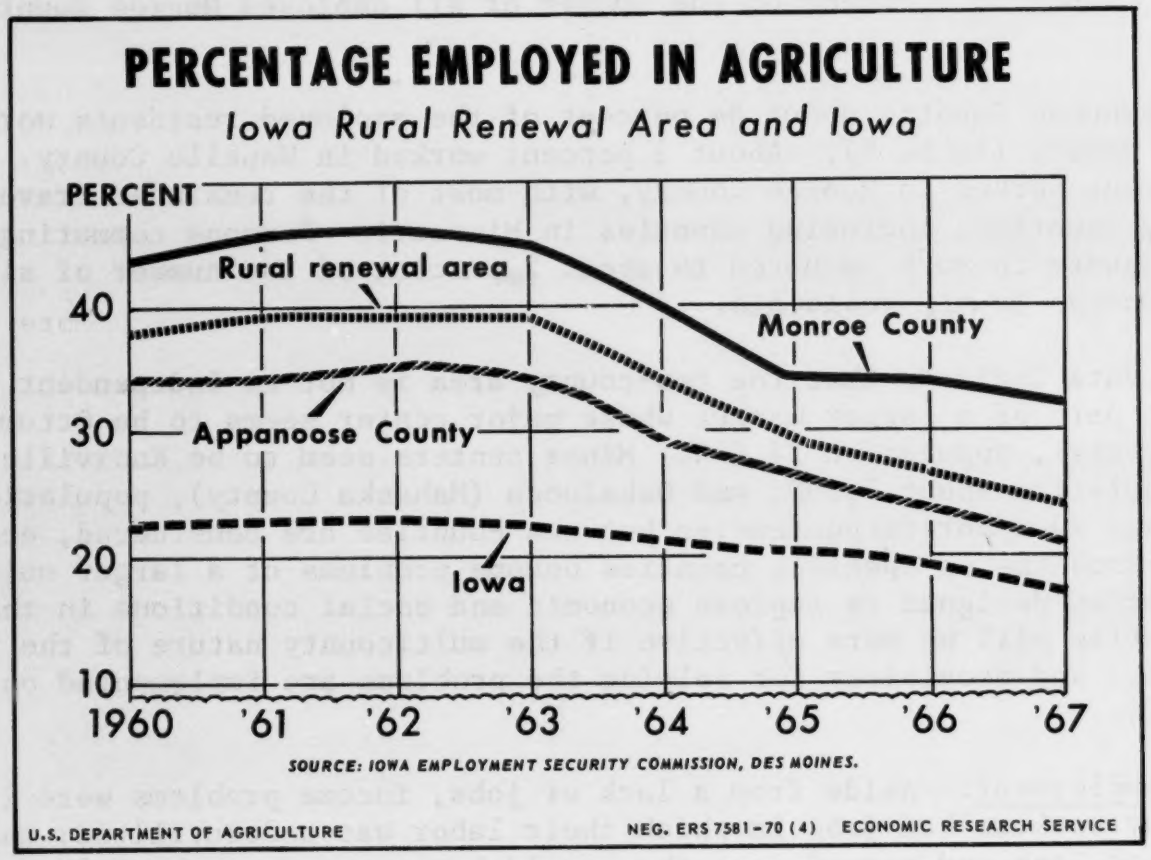

Figure 3

(table 4). Ratios for the same 2 years for all of Iowa were 23 percent and about 17 percent (table 7 and fig. 3). Despite this trend, the area's employment structure remained more agriculturally oriented than Iowa's structure, while Iowa had a greater proportion of workers in agriculture than did the Nation as a whole.

In 1967, the proportion of the area's labor force employed in manufacturing was 15.2 percent, a smaller proportion than the 18.6 percent for Iowa as a whole. Since 1960, employment in manufacturing has increased both absolutely and relatively in Appanoose County. In Monroe County, however, manufacturing employment has suffered both absolute and relative declines. Also, in 1967, proportionately fewer people were employed in wholesale and retail trade in the area than in Iowa--11.8 percent and 17 percent of the labor force, respectively; and fewer were employed in most services.

Commuting to work.--During the 1960's, unemployment and outmigration were moderated somewhat because many area residents commuted to jobs in nearby counties. More residents of Monroe County depended on jobs in surrounding counties than did residents of Appanoose County. Monroe County residents have easier access by highway to jobs in nearby Ottumwa (Wapello County), the largest trade center in south central Iowa.

In 1960, one out of four employed residents of Monroe County worked outside the county. Employers in Wapello County employed over 8 percent of Monroe County's employed; in addition, 4 percent worked in Marion County (table 8). Only about 1 percent worked in Appanoose County; most of the remaining commuters worked in other adjoining counties. The number of workers living outside but working in Monroe County failed to offset the number of Monroe County residents commuting to work outside the county. In 1960, commuters to Monroe County amounted to about 3.5 percent of the number of all employed Monroe County residents.

In Appanoose County, about 84 percent of the employed residents worked in their home county (table 8). About 3 percent worked in Wapello County. Less than 1 percent worked in Monroe County, with most of the remainder traveling to surrounding counties, including counties in Missouri. Persons commuting to Appanoose County to work amounted to about 2 percent of the number of all employed Appanoose County residents.

These data indicate that the two-county area is not an independent labor market, but part of a larger market whose major center seems to be Ottumwa (Wapello County), population 34,000. Minor centers seem to be Knoxville (Marion County), population about 7,800, and Oskaloosa (Mahaska County), population about 11,500. When such interdependencies between counties are considered, economic and social problems in specific counties become problems of a larger multicounty area. Policies designed to improve economic and social conditions in the two target counties will be more effective if the multicounty nature of the problems is recognized and provisions for solving the problems are implemented on a multicounty basis.

Underemployment.--Aside from a lack of jobs, income problems were increased because many workers had jobs in which their labor was underutilized; that is, they produced less and earned less than would be expected on the basis of national averages. Underutilization of labor was measured by estimates of

underemployment computed by the U.S. Department of Agriculture's Economic Research Service. 5/ The estimates were based on earnings of the labor force in each county compared with national earnings after adjustment for differences in education and age. In 1960, underemployment rates for males were 20.1 and 30.4 percent of the labor force in Monroe and Appanoose Counties, respectively. For females, the rates were 29.6 and 22.9 percent for the respective counties. These underemployment rates indicate that the area's labor force in 1960 had the capability to produce more output and generate more income than it did, but that demand for local labor was insufficient.

Industry Structure

Agriculture.--The rural renewal area tends heavily to cattle and hog production and field crops. These enterprises also predominate in Iowa as a whole. In 1964, about 47 percent of Iowa's farms were classified as "other livestock" (includes cattle and hogs), compared with 44 percent in the rural renewal area (table 9).

From 1959 to 1964, farms in the rural renewal area decreased in number but increased in size. A substantial gain in sales per farm resulted in an increase in the total value of total farm products sold. However, the farms were operated at a lower economic level than those in the rest of Iowa and the Nation. In 1964, the average value of farm products sold per farm was $7,194 in the area, compared with $16,843 for Iowa and $11,176 for the Nation. Compared with Iowa, a smaller proportion of all farms in the area were commercial farms in 1964: 75 percent for the two counties and 89 percent for Iowa. For the United States, the proportion was 69 percent. A major difference in structure was in the percentage of commercial farms producing a low volume of products for sale. In 1964, 68 percent of the area's commercial farms had sales of $10,000 or less, compared with only 37 percent in Iowa and 60 percent in the United States.

In the rural renewal area, the level of economic activity in the agricultural sector was below such levels in the State and Nation. Both total value of farm products sold and average value sold per farm increased faster in percentage terms from 1959 to 1964 in the area than in either Iowa or the Nation. Also, there was a greater relative increase in the area in the number of commercial farms with sales of $10,000 or more. However, absolute increases in the value of sales per farm were less in the area than in either Iowa or the United States. Consequently, the dollar gap in income between area farmers and Iowa farmers increased. This increase indicates that, compared with farmers at State and national levels, area farmers were worse off in terms of purchasing power in 1964 than they were in 1959. Annual estimates of gross farm income for years since 1964 show about the same rate of increase in the rural renewal area as in Iowa (table 10).

5/ Kampe, Ronald E., and Lindamood, William A. Underemployment Estimates by County, United States, 1960. U.S. Dept. Agr., Econ. Res. Serv., Agr. Econ. Rpt. 166, 1969.

Manufacturing.--The area's manufacturing plants are of small scale, employing relatively few employees each. Of the 24 plants located in Appanoose County in 1963, 18 employed fewer than 20 workers; only one plant employed as many as 50 workers. In the same year, six of Monroe County's eight manufacturing plants employed fewer than 20 workers, with one plant employing over 100 workers (table 11). Plants in the two counties provided a total of 630 jobs in 1963 (table 4).

Most of the area's manufacturing is in one of two categories. One type produces animal feeds, farm machinery, and other products related to agricultural production, such as meat slaughtering and poultry dressing products. The other type is similar to the type of manufacturing found in most small towns across the Nation. It includes bakeries, soft drink bottling plants, small woodworking mills, printing plants, and sheet metal shops. Notable exceptions in the area are plants producing trailer coaches and metal doors.

Trades.--The wholesale and retail trade sectors of the area's economy provided jobs for 1,010 people in 1967 (table 4). This was 11.8 percent of total employment in the rural renewal area and represented an average gain of 1.7 percent a year in employment in these sectors from 1960. Total retail sales activity in dollar amounts increased faster, however--from $27 million in 1960 to $34.2 million in 1967, a gain of 3.9 percent a year (table 12). Nevertheless, this gain was below the 4.3-percent annual gain in sales observed in Iowa. On a per capita basis, retail sales in the rural renewal area averaged nearly $1,400, up 4.9 percent a year from 1960, but continued at about four-fifths the per capita level for the State.

In the rural renewal area, the increase in retail sales was unevenly distributed over 1960-67, as well as unevenly distributed between the two counties. While the volume of sales was greater in Appanoose County, the increase in volume was lower than in Monroe County, and the bulk of the gain occurred after 1965. The volume of sales in the area for selected retail categories for 1960-67 is shown in table 13. As the data show, food and automobiles accounted for about 40 percent of total sales over the 8-year period.

Tourist trade.--Although at present the area has comparatively few recreational facilities to attract tourists, it has potential for an expanded tourist trade. A dam and an 11,000-acre reservoir were scheduled for completion in 1969 at Rathbun, Appanoose County. The U.S. Army Corps of Engineers, Kansas City District, has responsibility for construction. The purposes of the reservoir are to control floods, conserve water, and provide recreational access area. The Corps plans to develop four recreational areas for fishing, boating, swimming, picnicking, and camping. Tracts of land will be leased to private citizens to build a restaurant and motel at each recreation site.

Economic Status of Population

In 1960, the area's population was more rural, 57.7 percent, than either Iowa's or the Nation's, 46.9 percent and 30.1 percent, respectively; and over one-half the area's rural population lived on farms (table 14). Population estimates for the years 1960 to 1967 show that the area's rural population declined to under 55 percent of total population (table 15).

In 1960, the economic status of the rural population was below the national average for the rural population. An index constructed by the Economic Research Service to measure the relative economic status of the Nation's rural population places Monroe County in the middle fifth of all U.S. counties, and places Appanoose in the next to lowest fifth. 6/ The number and percentage of rural families receiving incomes under $3,000 in 1959 were factors used in computing the index. Other factors used were education, dependency for economic support, and housing conditions.

Income.--The area's rural population had income lower than the average for the rural population in Iowa and in the Nation. About 45 percent of the area's rural nonfarm families received less than $3,000 in 1959, compared with 40 and 29 percent for Iowa and the United States, respectively (tables 16-18). For farm families, the percentage receiving less than $3,000 was 46 percent, differing little from the 47 percent for both Iowa and the Nation. While the overall distribution of income within the area was similar among rural nonfarm and farm families, a larger percentage of rural families had lower incomes than urban families. A smaller percentage of the area's urban families had incomes over $7,000--14.7 percent, compared with 27.2 percent for Iowa and 40.4 percent for the Nation. These ratios indicate a lower level of income in the rural renewal area for all population strata.

Data were not available to permit an assessment of changes since 1960 in family income distribution in the area's rural and urban areas. There were, however, data which estimated trends in total, per capita, and per household personal income since that year and permitted comparisons between the rural renewal area and Iowa (tables 19, 20, and 21). 7/

Effective buying income, which is essentially personal income after deductions of tax and nontax liabilities to Federal, State, and local governments, grew from $34.6 million in 1960 to $54.1 million in 1967, an average increase of 8 percent a year (table 19). For the State, the increase was about the same, which indicates little change in the position of the area relative to the State. The distribution of total area income between the two counties remained about constant over this 8-year period, 61 percent accruing to Appanoose residents and 39 percent to residents of Monroe County.

Changes in income indicate that on a total basis the economy of the rural renewal area expanded at about the same rate as the State of Iowa. However, after the area's aggregate income is adjusted for population trends, the per capita level of income is clearly below the State level. From 1960 to 1967, both per capita and per household income increased faster in terms of percentage gain in the area than in Iowa (tables 20 and 21). Some of the gain in per capita income resulted from declines in population, however. The number of households remained relatively stable. The absolute difference between the area and the

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6/ Loomis, R. A., and Wirth, M. E. An Economic Survey of the Northern Lake States Region. U.S. Dept. Agr.,Econ. Res. Serv., Agr. Econ. Rpt. 108, 1967.

7/ The per household income data in table 21 are not comparable with the family income data discussed in the previous section and in tables 16 and 17.

State increased for both per capita and per household income over the 8-year period. In 1960, the area's per capita income was $1,321; $512 below the average for Iowa. By 1967, per capita income had increased to $2,192 for the area, but the disparity had also increased, growing to $587 below the State average (table 20). On a per household basis, the difference in income grew from $1,748 in 1960 to $2,576 in 1967 (table 21). Therefore, in terms of purchasing power, the economic status of area residents declined relative to that of all Iowa residents from 1960 to 1967.

Recently available estimates of longrun trends in personal income for Appanoose and Monroe Counties agree with the above conclusions: the level of aggregate income in the area rose at about the same rate as the level for the State as a whole from 1960 to 1967. During the 1950's, however, gains in general business activity in the area were much slower than gains in the State (tables 22 and 23).

Banking activity.--Local banking activity generally reflects the economic status of an area's population. Increases in total deposits in the area's four banks--two in Centerville (Appanoose County) and two in Albia (Monroe County)--show greater percentage gains than do increases in total effective buying income over 1960-67. In the area, total bank deposits increased about 10 percent a year, which was about the same as the gain in the State (table 24). On a per capita basis, bank deposit gains were more impressive, averaging 11.4 percent a year for the rural renewal area, compared with 9.4 percent for the State (table 25). However, as was the case with per capita income, the level of per capita bank deposits in the area was below that of the State in 1960 and the disparity increased over the period. In 1960, average per capita bank deposits in the area were $755; $310 below the average for Iowa. By 1967, the difference had increased to about $400 per capita.

Condition of housing.--The quality of housing in an area tends to reveal longrun economic conditions. Available housing data show that in 1960 no major area of the Nation was without some poor-quality housing. 8/ However, the quality of housing varies considerably among areas according to the proportion of dilapidated and deteriorating units and the proportion of houses without some plumbing facilities.

In 1960, housing in the rural renewal area, measured by its condition, was inferior to average housing in Iowa and the United States. For every 100 housing units, seven were dilapidated and 30 were deteriorating, which left only 63 sound housing units. Corresponding Iowa figures were four dilapidated, 17 deteriorating, and 79 sound housing units (table 26).9/ Percentages for the United States varied little from those for Iowa.

Rural housing is generally inferior to urban housing. Inferior rural housing prevailed in 1960 in the area, where 8.6 percent of the rural houses were in a dilapidated condition and 36.7 percent were deteriorating (table 26). Within the area, conditions were worse in Appanoose County; about 10 percent of the rural houses were dilapidated, compared with 5.5 percent in Monroe County.

8/ U.S. Census of Housing, 1960. Bureau of the Census.

9/ See table 26 for definition of sound, deteriorating, and dilapidated housing units.

In 1960, a smaller proportion of all sound and deteriorating housing units in the rural renewal area had complete plumbing facilities than in Iowa (table 26). In the rural renewal area, 57.1 percent of such units had complete plumbing, compared with 82.3 percent in Iowa. In the rural areas of the two counties, only 42 percent of the sound and deteriorating housing units had complete plumbing, compared with 74.1 percent in Iowa as a whole.

In 1960, there 664 dilapidated houses in the two counties, with 497 located in rural areas. The seriousness of the problem was lessened somewhat by the fact that 236, or 35.5 percent, of all dilapidated structures were vacant the year round in 1960, which left 428 dilapidated houses occupied. A significant problem in the rural renewal area is replacing with quality units the occupied dilapidated units which do not provide safe and adequate shelter, and which endanger the health, safety, and well-being of the occupants. In addition, many of the structures deteriorating in 1960 may have become dilapidated, adding to the number of inadequate, unsafe houses available for occupancy.

Houses in the area are relatively old. In 1960, about 87 percent of the houses were 40 years old or older. Houses this old, unless extensively rebuilt, do not contain the features desired by families with income commensurate with a growing economy. Therefore, if the rural renewal area develops a strong economic base and grows, there will be a need to construct quality housing or rebuild present housing. In general, rural areas lack protective standards and codes for housing construction and occupancy of dwellings. Such codes would more than likely result in higher quality (but also higher priced) housing in the rural renewal area.

Community Facilities and Services

Adequate community facilities and services are necessary for economic growth and development; a lack of these is associated with economic and social stagnation and deterioration of communities. Because of existing governmental jurisdictions and community attitudes, some community facilities and services are located entirely within county boundaries. Primary and secondary educational facilities and services are examples. Other services and facilities--medical ones, for example--may be partially located outside the county, yet provide adequate services. In the following discussion, the adequacy of community facilities and services in the rural renewal area is appraised by comparing existing area facilities with similar facilities in Iowa. Specific references are made to water supply, sewage disposal, and medical services, and to expenditures for education, highway, and other public services.

Water supply.--In 1960, occupants of six of every 10 housing units in the renewal area (both rural and nonrural parts) got their water from private wells and ponds and other surface water sources--sources not usually required to comply with the health standards required of most public systems or of private systems providing water for public consumption (table 27). The main source of water for this group was private wells, but occupants of about 4 percent of all housing units obtained water from springs, ponds, and similar surface sources which are easily polluted. Fewer area residents had access to a public water system than did residents in the rest of Iowa. For the State of Iowa, about 60 percent of all housing was connected with a public water system.

Rural areas usually have poorer access to public water than do urban areas. Table 27 indicates that the rural parts of the renewal area are no exception. In 1960, the last year for which statistics are available, only about 7 percent of the rural houses obtained water from a public system, compared with about 93 percent in the urban areas.

Sewage disposal.--Fewer area residents had access to a sanitary public sewer than had access to public water. In 1960, sewage from about 38 percent of all housing units in the rural renewal area was disposed of in a public system, compared with about 51 percent in Iowa (table 28). About 22 percent of all housing units in the renewal area used septic tanks or cesspools. About 40 percent of all units--3,947 houses--and over 60 percent of rural housing units dumped untreated sewage into shallow latrines or streams.

Economic development in the area will require an adequate supply of clean water and sanitary sewage disposal systems for existing firms and homes, as well as for new industries and new homes. Under present conditions, it is more than likely that most new industries would have to provide their own water supply and sewage disposal systems. The same is true for new homes, unless they happen to be constructed in the relatively few areas where a system now exists.

The number of homes using untreated surface water and disposing of untreated sewage in a manner that easily pollutes the water supply indicates a lack of protective health standards for water utilization and sewage disposal in the area. Enactment of appropriate health regulations would upgrade the quality of community services in the two counties and make the area more attractive to prospective industries and residents.

Medical services.--The adequacy of medical services available to residents in the rural renewal area can be only partially evaluated by looking at the services located within its borders. A complete evaluation necessitates consideration of services located nearby and which are used by the two counties' residents. Area residents have access to comprehensive medical services, including public health services, in nearby Ottumwa, Wapello County. However, costs of obtaining services there are increased for area residents because of costs related to travel.

Hospital facilities, physicians, and dentists are regarded as the key elements of a region's medical services. This does not imply the dispensability of additional services, such as extended-care facilities and services of health specialists, but such services are rarely available in areas that lack adequate hospitals and physicians.

Appanoose County has a 78-bed general hospital, located in Centerville. It meets 98 percent of the county's present need for bed space, but needs modernizing. 10/ Monroe County has a 44-bed general hospital, located in Albia. It meets only 71 percent of the county's needs, is substandard, and requires extensive modernization. In 1968, no plans existed for the immediate improvement of either hospital.

10/ Except where otherwise noted, the information in this section was obtained from the 1968 Iowa State Plan, published by the Iowa State Department of Health.

In 1967, Appanoose County had 12 physicians and Monroe County had three. Except for one hospital-based physician in Appanoose, all physicians were general practitioners. Specialists must either be brought in or, as is more likely, patients must travel to Ottumwa for consultation and treatment. Table 29 shows there was a substantial difference in the number of people per physician in the two counties in 1967: 1,275 in Appanoose and 3,200 in Monroe. For Iowa as a whole, there were 1,096 people per physician.

While simple ratios alone are inadequate measures of the quantity or quality of health care received by a population, it seems that the population of Monroe County is relatively disadvantaged based on the county's people per physician ratio. Assuming that Monroe's residents do obtain adequate physicians' services by traveling outside the county, they presumably incur additional costs by doing so.

In 1966, Monroe County was relatively well supplied with dentists compared with Appanoose County and with similar rural counties in the United States in 1963 (table 29). While Appanoose compares favorably with similar counties in the Nation, it should be assumed that some Appanoose residents seek dental care outside the county. For equivalent dental care, the per capita cost would thus be higher for Appanoose residents than for Monroe residents.

Neither county has an extended-care facility. But in both counties, the percentage of the population over 65 years old is high--19.5 percent in Monroe and 21.5 percent in Appanoose. The former county needs a 66-bed extended-care facility and the latter a 110-bed facility. There are, however, no existing plans for providing for either need. The lack of facilities means that those in need of extended care who cannot be treated at home must either use facilities in other counties or use their local hospitals. The first alternative, while accessible, creates distance and cost problems for visitors as well as patients; the second alternative is an expensive method of receiving extended care.

There is also an urgent need for a modern diagnostic and treatment center in Monroe County. An existing facility at the hospital in Albia is totally inadequate and has the highest modernization priority in the State.

In summary, Appanoose and Monroe are rather typical, rural midwestern counties with respect to medical services. Both have community general hospitals which need modernizing and other improvements. Extended care needs of patients must be met outside the area, or at high cost in the local hospitals. Professional services are available in the area from general practitioners and dentists. In all categories of health care, there is either a lack of specialized services, general services, or both. This means that area residents depend on services in other counties for many of their needs. Thus, costs of obtaining many services are higher.

Expenditures for community facilities and services.--In 1962, over two-thirds of the expenditures by local governments in the rural renewal area were for education and highways, with education receiving the larger share--45.5 percent of total outlays (table 30). Expenditures for public welfare ranked a distant third--5.5 percent of total outlays.

Local governments in Appanoose County allocated a significantly greater percentage for education than did local governments in Monroe County. In this respect, the proportion for Appanoose compared favorably with the average for the State--52.3 percent and 49.8 percent, respectively--while Monroe allocated only 36.5 percent of total expenditures for education. Both counties allocated more of their monies to public welfare and highway construction and maintenance than did the average county in the State.

The inadequacy of sewage disposal in the rural renewal area pointed out previously also can be seen in table 30. On the average, local governments in Iowa allocated nearly 5 percent of total outlays to sewage disposal and other sanitation practices. In the rural renewal area, less than 1 percent was so allocated.

A look at the distribution of local government expenditures adjusted for differences in population tells essentially the same story and points out the areas where increases are needed to bring the area up to the average for the State (table 31). Less money was spent per person for education and sanitation, as well as for police, fire protection, and libraries, while more was allocated for highways and public welfare.

Tax Revenue

Total tax revenues from selected sources increased from 1960 to 1967 (tables 32, 33, and 34). Total State income taxes increased faster during this period in the area than in the rest of Iowa, while retail sales and use taxes increased at a slower rate. Retail sales and State income taxes per capita showed a slightly greater gain in the area than in the State, but gains in use taxes per capita were smaller. In absolute terms, however, increases in taxes per capita were less in the area than in the State, and remained at a lower economic level in 1967, indicating a relatively smaller tax base in the area. In 1967, retail sales taxes per capita were only four-fifths the State level, income taxes were about three-fifths, and use taxes only slightly above one-half the State level.

INDEX OF ECONOMIC ACTIVITY

The measures of the renewal area's economic and social conditions presented separately in this report are needed for determining trends in the individual indicators. Comparisons with State data established a relative level for each indicator separately. This presented an overview of problem areas and should be helpful to persons interested in specific parts of the area's economic and social structure.

A single index or measure that estimates the overall trend in the area's economic growth, and measures simultaneously the level of economic activity relative to the State level, is now presented to improve the usefulness of the analysis, especially to planners interested in the total growth and development of the area's economy. In this section, the array of variables is reduced to such an index. Ten variables assumed to adequately measure the overall trend in the

area's economy were first selected. Data for the 10 variables were then reduced for each year, 1960 through 1967, to index numbers that measure growth rates in economic activity and that establish levels of economic activity relative to Iowa as a whole.

It is necessary to look at the level of economic activity relative to that of a base area, as well as trends in activity, to make a judgment about how well a small area is performing. The level of activity in an area compared with the level in a base area shows the gap between the two. In the case of the Iowa rural renewal area, the average level of economic activity is lower than the State average. Comparison of the respective averages shows the gap that must be closed for the area to attain the same level as the State.

A basic requirement for computing the index numbers was that data for the selected variables for both the rural renewal area and for Iowa be available for each year, 1960 through 1967. This limited the selection to relatively few variables. From those meeting this requirement, the following variables were subjectively selected.

1. Number of households
2. Urban population
3. Farm population
4. Effective buying income
5. Gross farm income
6. Bank deposits
7. Retail sales
8. State income taxes paid
9. Retail sales taxes paid
10. Use taxes paid

To establish the level of economic activity in the rural renewal area relative to the State level, data for these variables were adjusted for population differences. Data for all the selected variables except gross farm income were divided by total population; gross farm income data were divided by farm population.

The method used to combine the 10 indicators into a composite index was factor analysis. Eigenvectors were computed for each variable in 1960; all 99 counties in Iowa were used as observations. Eigenvectors were used to compute an unscaled index. The unscaled index was then scaled so that when the value of each variable used was equal to the value for the corresponding State variable in 1960, the index was equal to 100. This procedure permitted comparison of the level of economic activity in the Iowa rural renewal area with the State average. 11/

11/ For a description of factor analysis and the method used to scale the index, see Waugh, F. V. Factor Analysis: Some Basic Principles and an Application, in Farm Operator Level-of-Living Indexes for Counties in the United States, 1950, 1959, and 1964, U.S. Dept. Agr., Econ. Res. Serv., Stat. Bul. 406, June 1967.

The index numbers depicting growth rates in economic activity per capita for the period 1960-67, for the rural renewal area and for Iowa, are the products of the scaled weights and annual data for the 10 variables. The weights and annual data are listed in tables 35 and 36. The results are shown in figure 4 and table 37.

The weights can be positive or negative. The sign of the weight of a given variable is influenced by (1) how the variable directly contributes to economic activity, and (2) what each variable contributes in relation to the contribution of the other variables used in computing the index. A positive weight means that increases in the size of the variable contribute to increases in economic growth, while a negative weight indicates that the magnitude of economic activity declines as the size of the variable increases.

Table 35 shows that weights for the variables, except farm population, were positive. This is consistent with observed relationships associated with economic activity.

The positive weight for urban population reflects the observation that incomes accruing to residents of urban areas are higher than incomes for residents of rural areas. Therefore, as the percentage of population classified as urban increases, per capita income increases. Conversely, farm income per farm resident is usually lower than nonfarm income per capita. Therefore, counties in which farm population comprises a relatively large percentage of total population tend to have lower per capita incomes. Hence, the negative sign on the farm population weight.

The positive sign on the household weight takes a bit more explanation. When other things are held constant, the size of household is usually negatively related to per capita income when household is expressed as the average number of persons per household. The variable used in this analysis was not the number of persons per household, but the inverse, which is the number of households divided by population. As the number of households per person increases, a rise which is equivalent to a decline in the number of persons per household, per capita income tends to increase. Therefore, the positive sign on the household weight is consistent with observed changes. The other variables have positive weights and are obviously, if not definitionally, related to income per capita.

Figure 4 and table 37 show that the level of economic activity per capita in the rural renewal area was only 69 percent of the average for Iowa in 1960. Of the two counties comprising the area, Appanoose County had the higher level. During 1960-67, the annual rate of change in the area was greater than in the State--8.9 and 7.7 percent, respectively. However, this gain in relative terms for the area was insufficient to close the gap in the level of activity per capita. In fact, the disparity increased, leaving the area further behind the State in 1967 than it was in 1960. In 1960, the area's level of economic activity per capita was 31 percentage points below the State's level. Little change occurred in this position until 1966-67, when the gap expanded to slightly over 41 percentage points by 1967 (fig. 5).

Changes in total economic activity were estimated by inflating the per capita indexes by population. The result of changes in population and economic activity per capita are shown in table 37 and figure 6 for the rural renewal

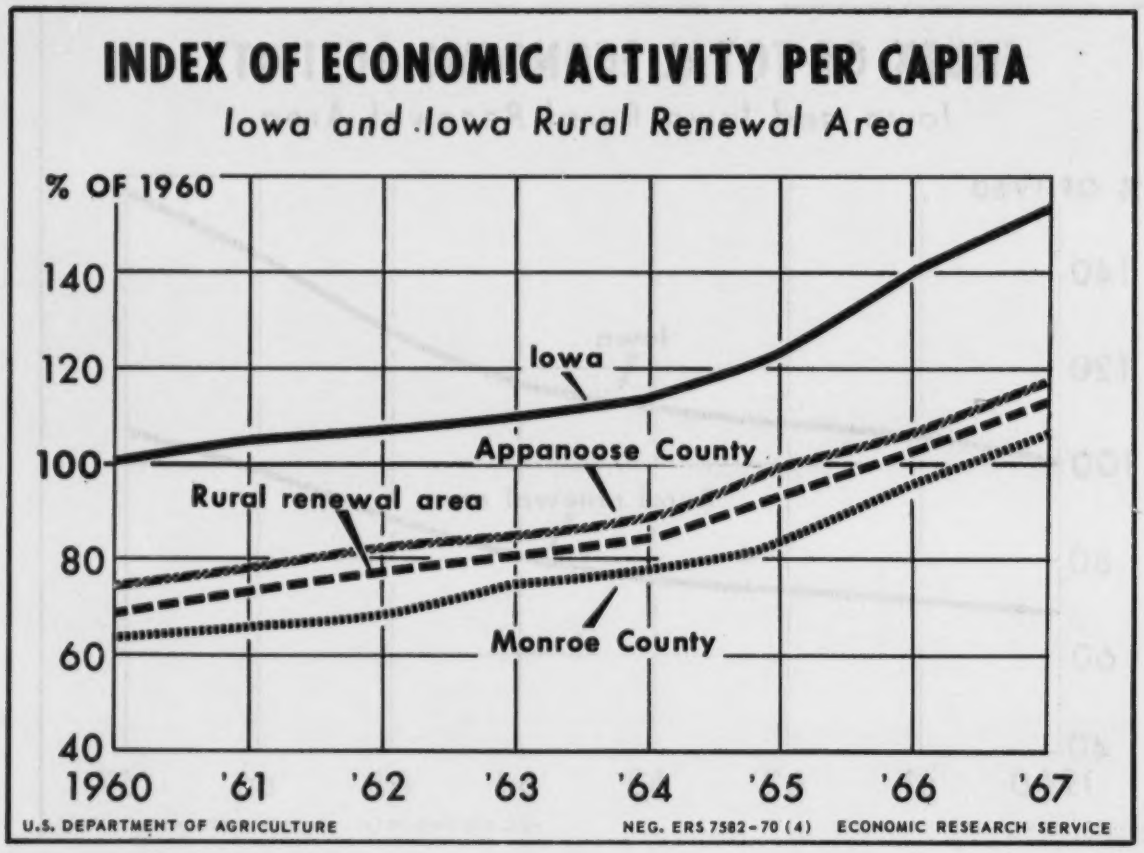

Figure 4

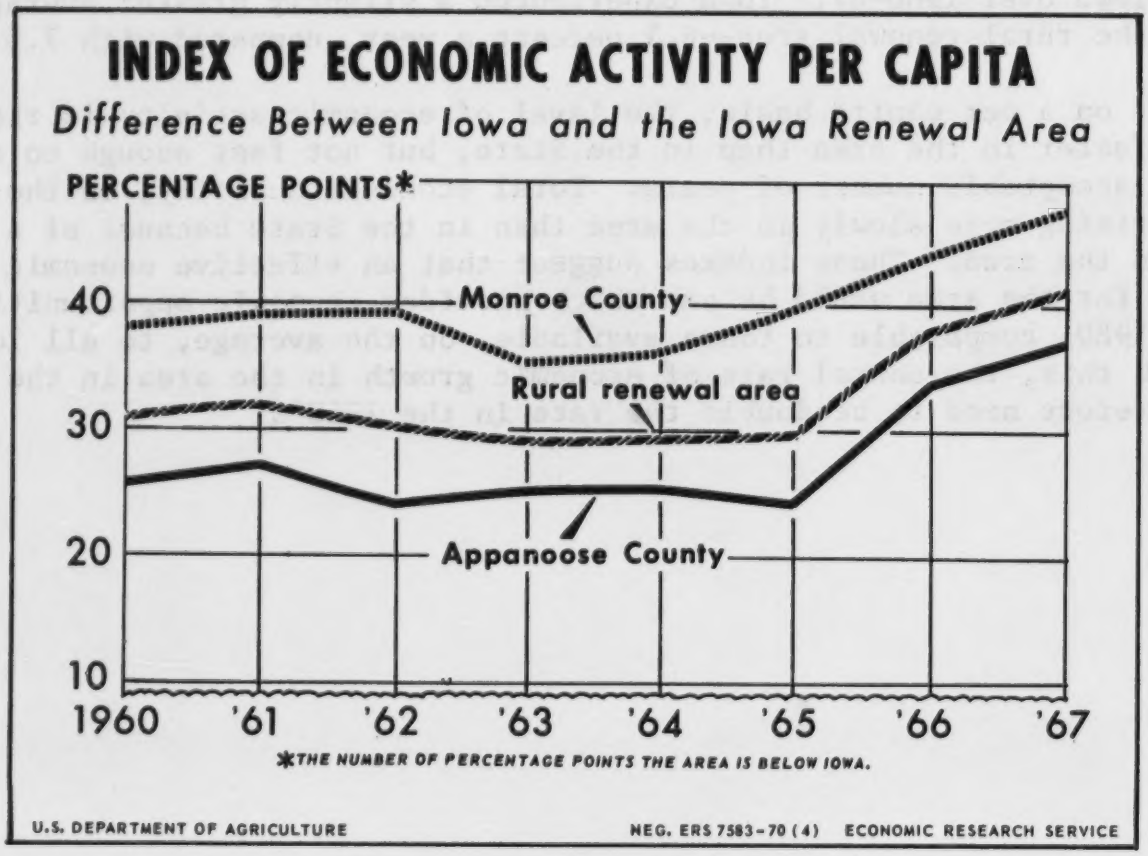

Figure 5

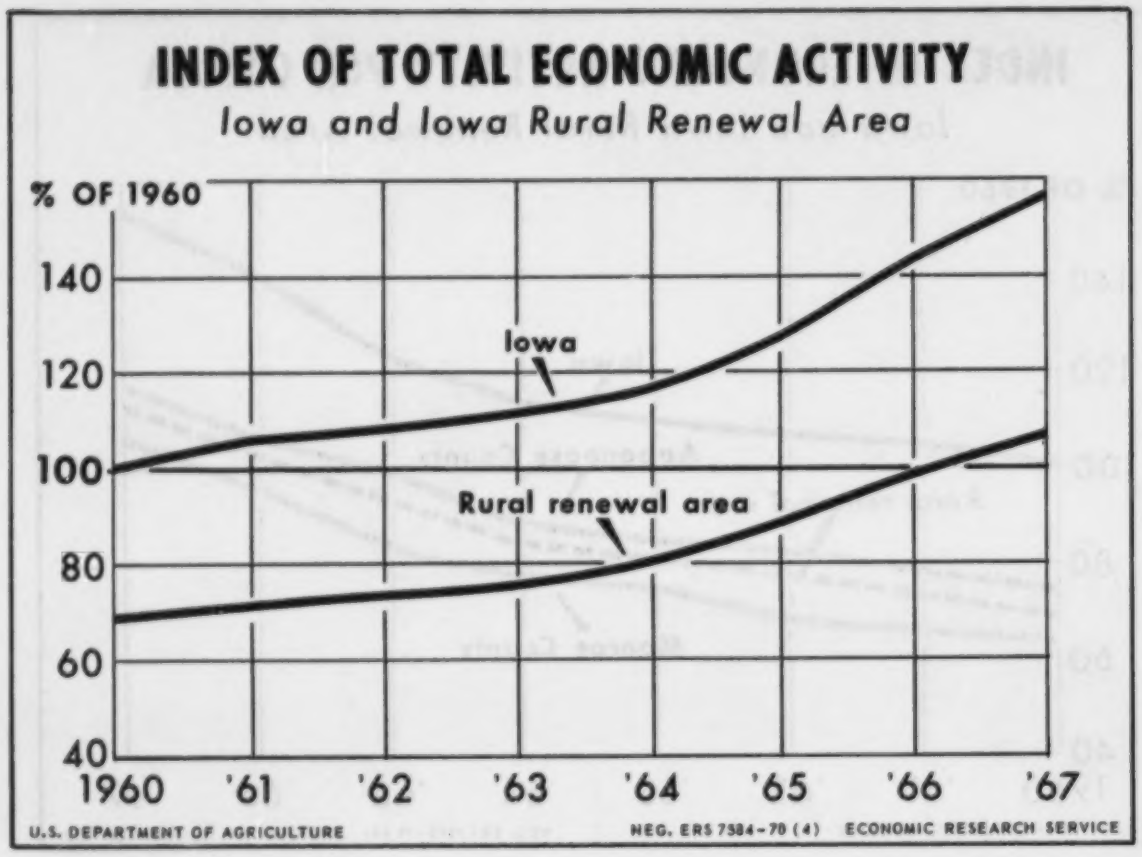

Figure 6

area and Iowa over 1960-67. Iowa experienced a slightly greater average gain than did the rural renewal area--8.1 percent a year, compared with 7.5 percent.

Thus, on a per capita basis, the level of economic activity is rising slightly faster in the area than in the State, but not fast enough to close the gap in an acceptable number of years. Total economic activity, on the other hand, is rising more slowly in the area than in the State because of a population decline in the area. These indexes suggest that an effective economic development plan for the area would be one which provides economic opportunities in the area, by 1980, comparable to those available, on the average, to all Iowans. To accomplish this, the annual rate of economic growth in the area in the 1970's would therefore need to be double the rate in the 1960's.

Table 1.--Population change in the Iowa rural renewal area, Iowa, and the United States, 1950-66

Area	Population			Population change		Net migration	
	1950	1960	1966	1950-60	1960-66	1950-60	1960-66
	Thousands	Thousands	Thousands	Percent	Percent	Percent	Percent
Rural renewal area	31.5	26.5	24.9	-15.9	-6.4	-21.6	-7.6
Appanoose County	19.7	16.0	15.6	-18.6	-2.9	-24.0	-4.4
Monroe County	11.8	10.5	9.3	-11.4	-11.2	-17.6	-12.4
Iowa	2,621.1	2,757.5	2,760.0	5.2	0.1	-8.7	-6.5
United States	151,326	179,323	196,920	18.5	9.8	--	--

Source: U.S. Census of Population, 1950, 1960; and Estimates of the Population of Counties, July 1, 1966. Bureau of the Census, Current Population Reports, Series P-25, No. 407, Rpt. No. 3.

Table 2.--Households and persons per household in the Iowa rural renewal area and Iowa, 1960-67

Year	Appanoose County	Monroe County	Rural renewal area	Iowa
		Households		
1960	5,300	2,900	8,200	849,300
1961	5,400	3,200	8,600	849,800
1962	5,300	3,100	8,400	854,500
1963	5,200	3,100	8,300	854,400
1964	5,400	3,100	8,500	859,800
1965	5,200	3,100	8,300	862,900
1966	5,400	3,100	8,500	863,200
1967	5,300	3,100	8,400	865,100
		Persons per household		
1960	3.0	3.6	3.2	3.3
1961	2.9	3.2	3.0	3.3
1962	2.8	3.2	3.0	3.3
1963	2.9	3.2	3.0	3.3
1964	2.8	3.2	2.9	3.3
1965	2.9	3.1	3.0	3.3
1966	2.9	3.1	3.0	3.3
1967	2.9	3.1	2.9	3.3

Source: Sales Management Survey of Buying Power. Sales Management, Inc., New York, Copyright 1961-68. Further reproduction is prohibited without permission of the publisher.

Table 3.--Employment and unemployment in the Iowa rural renewal area, Iowa, and the United States, 1950 and 1960

Area	Total employment 1/		Employment change, 1950-60	Unemployment	
	1950	1960		1950	1960
	Number	Number	Percent	Percent	Percent
Rural renewal area.	10,739	8,578	-20.1	3.2	5.0
Appanoose County.	6,532	5,097	-22.0	4.0	5.4
Monroe County....	4,207	3,481	-17.3	2.0	4.4
Iowa.....	1,002,180	1,019,002	1.2	1.8	3.2
United States.....	56,239,449	64,639,112	14.9	4.8	5.1

1/ Employment status determined by place of residence.

Source: U.S. Census of Population, 1950, 1960.

Table 4.--Civilian labor force of the Iowa rural renewal area, 1960-67 1/

Item	1960	1961	1962	1963	1964	1965	1966	1967	Change, 1960-67
	Number								Percent
Civilian labor force	9,660	9,640	9,380	9,270	9,040	8,510	8,700	8,910	-7.8
Unemployment	670	920	740	580	500	420	300	360	-46.3
Percentage of labor force unemployed	Percent								
	6.7	9.5	7.9	6.3	5.5	4.9	3.4	4.0	-
	Number								
Employment, total	8,990	8,720	8,640	8,690	8,540	8,090	8,400	8,540	5.0
Nonagricultural workers, except domestics	4,050	3,840	3,840	3,890	4,120	4,240	4,580	4,910	21.2
Manufacturing	620	580	590	630	740	780	1,010	1,300	109.7
Nonmanufacturing	3,430	3,260	3,250	3,260	3,380	3,460	3,570	3,610	5.2
Transportation, and other public utilities	690	630	570	520	490	480	470	470	-31.9
Wholesale and retail trade	900	870	900	910	950	970	1,000	1,010	12.2
Service	450	450	450	470	530	550	560	590	31.1
Government	870	830	860	890	930	940	970	950	9.2
Other nonmanufacturing	520	480	470	470	480	520	570	590	13.5
Other nonagricultural employment 2/	1,530	1,480	1,400	1,440	1,550	1,530	1,530	1,550	1.3
Agriculture	3,410	3,400	3,400	3,360	2,870	2,320	2,290	2,090	-38.7

1/ Data are by place of work.
2/ Includes nonagricultural self-employed, unpaid family and domestic workers in private households.

Source: Data are from Iowa Employment Security Commission, Des Moines.

Table 5.--Civilian labor force of Appanoose County, Iowa, 1960-67 1/

Item	1960	1961	1962	1963	1964	1965	1966	1967	Change, 1960-67
	Number								Percent
Civilian labor force	5,850	5,870	5,650	5,620	5,680	5,520	5,790	6,080	3.9
Unemployment	450	600	450	380	300	270	180	240	-46.7
Percentage of labor force unemployed	7.7	10.2	8.0	6.8	5.3	4.9	3.1	3.9	-
	Number								
Employment, total	5,400	5,270	5,200	5,240	5,380	5,250	5,610	5,840	8.1
Nonagricultural workers, except domestics	2,590	2,490	2,480	2,500	2,720	2,830	3,170	3,490	34.7
Manufacturing	310	330	350	390	530	580	830	1,100	254.8
Nonmanufacturing	2,280	2,160	2,130	2,110	2,190	2,250	2,340	2,390	4.8
Transportation, and other public utilities	530	490	440	410	400	400	390	380	28.3
Wholesale and retail trade	580	550	560	580	600	620	660	660	13.8
Service	290	290	290	300	350	370	370	400	37.9
Government	490	470	490	490	490	490	490	490	0
Other nonmanufacturing	390	360	350	330	350	370	430	460	17.9
Other nonagricultural employment 2/	990	970	910	950	1,070	1,070	1,110	1,130	14.1
Agriculture	1,820	1,810	1,810	1,790	1,590	1,350	1,330	1,220	-33.0

1/ Data are by place of work.
2/ Includes nonagricultural self-employed, unpaid family and domestic workers in private households.

Source: Data are from Iowa Employment Security Commission, Des Moines.

Table 6.--Civilian labor force of Monroe County, Iowa, 1960-67 1/

Item	1960	1961	1962	1963	1964	1965	1966	1967	Change, 1960-67
	Number								Percent
Civilian labor force	3,810	3,770	3,730	3,650	3,360	2,990	2,910	2,830	-25.7
Unemployment	220	320	290	200	200	150	120	130	-40.9
Percentage of labor force unemployed	Percent								
	5.8	8.5	7.8	5.5	6.0	5.0	4.1	4.5	-
	Number								
Employment, total	3,590	3,450	3,440	3,450	3,160	2,840	2,790	2,700	-24.8
Nonagricultural workers, except domestics	1,460	1,350	1,360	1,390	1,400	1,410	1,410	1,420	-2.7
Manufacturing	310	250	240	240	210	200	180	200	-35.5
Nonmanufacturing	1,150	1,100	1,120	1,150	1,190	1,210	1,230	1,220	6.1
Transportation, and other public utilities	160	140	130	110	90	80	80	90	-43.8
Wholesale and retail trade	320	320	340	330	350	350	340	350	9.4
Service	160	160	160	170	180	180	190	190	18.8
Government	380	360	370	400	440	450	480	460	21.1
Other nonmanufacturing	130	120	120	140	130	150	140	130	0
Other nonagricultural employment 2/	540	510	490	490	480	460	420	410	-24.1
Agriculture	1,590	1,590	1,590	1,570	1,280	970	960	870	-45.3

1/ Data are by place of work.
2/ Includes nonagricultural self-employed, unpaid family and domestic workers in private households.

Source: Data are from Iowa Employment Security Commission, Des Moines.

Table 7.--Civilian labor force of Iowa, 1960-67 1/

Item	1960	1961	1962	1963	1964	1965	1966	1967	Change, 1960-67
	Thousands								Percent
Civilian labor force	1,104	1,114	1,112	1,118	1,122	1,138	1,186	1,205	9.1
Unemployment	33	42	36	33	29	27	24	29	-12.1
Percentage of labor force unemployed	Percent								
	3.0	3.8	3.2	3.0	2.6	2.4	2.0	2.4	-
	Thousands								
Employment, total	1,071	1,072	1,076	1,085	1,093	1,111	1,162	1,176	9.8
Nonagricultural workers, except domestics	681	680	686	701	720	754	807	841	23.5
Manufacturing	177	172	175	178	184	192	212	219	23.7
Nonmanufacturing	504	508	512	523	537	562	595	622	23.4
Construction	37	34	32	34	35	37	41	41	10.8
Transportation, and other public utilities	53	51	50	49	49	50	50	50	-5.6
Wholesale trade	42	43	43	43	42	44	46	46	9.5
Retail trade	127	127	127	130	135	142	149	154	21.3
Finance, insurance, and real estate	32	32	33	34	35	36	37	38	18.8
Service	93	96	99	101	105	112	120	130	39.8
Government	117	112	125	129	133	138	148	159	35.9
Other nonmanufacturing	3	3	3	3	3	3	3	3	0
Other nonagricultural employment 2/	143	146	141	139	141	140	139	137	-4.2
Agriculture	247	246	248	245	231	217	217	197	-20.2

1/ Data are by place of work.
2/ Includes nonagricultural self-employed, unpaid family and domestic workers in private households.

Source: Data are from Iowa Employment Security Commission, Des Moines.

Table 8.--Residents' place of work, Appanoose and Monroe Counties, Iowa, 1960

Place of residence	Total employed 1/	Percentage of workers employed in: 2/						
		Appanoose County	Monroe County	Wapello County	Marion County	Mahaska County	Other places	Place of work not reported
	Number	Percent						
Appanoose County 3/.	5,097	84.3	0.5	2.7	0.1	0.1	3.1	6.4
Monroe County 4/....	3,481	1.1	75.0	8.2	3.8	1.1	4.4	4.8

1/ Total employed by place of residence.
2/ Percentages may not total 100 because place of work estimates are based on a sample of the work force.
3/ Excludes 105 workers living outside Appanoose County who worked in the county.
4/ Excludes 122 workers living outside Monroe County who worked in the county.

Source: U.S. Census of Population, 1960. Special Table PH-4.

Table 9.--Selected characteristics of farms in the Iowa rural renewal area, Iowa, and the United States, 1959 and 1964

Item	Unit	Rural renewal area			Iowa			United States		
		1959	1964	Percentage change	1959	1964	Percentage change	1959	1964	Percentage change
Farms	Number	2,610	2,278	Percent -12.7	174,695	154,162	Percent -11.8	3,710,503	3,157,857	Percent -14.9
Average size of farm	Acre	210.8	238.2	13.0	193.6	219.0	13.1	302.8	351.6	16.1
Value of farm products sold	1,000 dol.	13,512	16,388	21.3	2,284,110	2,596,544	13.7	30,625,374	35,293,530	15.2
Average value of farm products sold per farm	Dollar	5,072	7,194	41.8	13,074	16,843	28.8	8,259	11,176	35.3
Type of farm:	Number									
Field crops	do.	250	374	49.6	31,241	36,705	17.5	868,285	1,006,609	15.9
Poultry	do.	10	9	-10.0	1,814	1,529	-15.7	103,279	104,638	1.3
Dairy	do.	140	106	-24.3	11,363	12,961	14.1	428,293	400,422	-6.5
Other livestock	do.	1,299	1,001	-22.9	96,197	72,602	-24.5	616,902	882,431	43.0
General	do.	161	203	26.1	13,187	12,852	-2.5	212,613	282,653	32.9
Other 1/	do.	750	585	-22.0	20,893	17,513	-16.2	120,486	374,414	210.8
Economic class of farms:										
Commercial farms	do.	1,865	1,713	-8.2	154,334	137,537	-10.9	2,416,017	2,165,712	-10.4
Class I (sales of $40,000 or more)	do.	3	20	566.7	8,110	11,150	37.5	102,099	141,914	39.0
Class II (sales of $20,000 to $39,999)	do.	38	105	176.3	21,579	29,073	34.7	210,402	259,898	23.5
Class III (sales of $10,000 to $19,999)	do.	372	425	14.2	48,045	46,287	-3.7	483,004	467,096	-3.3
Class IV (sales of $5,000 to $9,999)	do.	627	554	-11.6	47,408	31,546	-33.5	653,881	504,614	-22.8
Class V (sales $2,500 to $4,999)	do.	630	431	-31.6	23,537	15,390	-34.6	617,677	443,918	-28.1
Class VI (sales of $150 to $2,499)	do.	195	178	-8.7	5,655	4,091	-27.7	348,954	348,272	-0.2
Other farms	do.	740	565	-23.6	20,361	16,625	-18.3	1,291,956	992,145	-23.2
Part-time 2/	do.	415	323	-22.2	11,660	9,345	-19.9	884,785	639,409	-27.7
Part-retirement 3/	do.	320	240	-25.0	8,616	7,215	-16.3	404,110	350,558	-13.3
Abnormal	do.	5	2	-60.0	85	65	-23.5	3,061	2,178	-28.8

1/ Includes fruit and nuts, vegetable, miscellaneous, and unclassified farms.
2/ Part-time indicates operator working off farm 100 days or more, and farm sales $50 to $2,499.
3/ Part-retirement indicates operator 65 years old and over, and farm sales $50 to $2,499.

Source: U.S. Census of Agriculture, 1959, 1964. Bureau of the Census.

Table 10.--Gross farm income, Iowa rural renewal area and Iowa, 1960-67

Year	Appanoose County	Monroe County	Rural renewal area	Iowa
	1,000 dol.			
1960	8,633	7,243	15,876	2,744,020
1961	9,111	7,592	16,703	2,810,451
1962	9,440	7,866	17,306	2,911,989
1963	9,065	7,554	16,619	2,796,299
1964	9,040	7,534	16,574	2,778,600
1965	10,684	8,904	19,588	3,295,492
1966	11,867	9,890	21,757	3,660,487
1967	12,268	10,224	22,492	3,774,098
	Indexes (1960=100)			
1960	100	100	100	100
1961	106	105	105	102
1962	109	109	109	106
1963	105	104	105	102
1964	105	104	104	101
1965	124	123	123	120
1966	137	137	137	133
1967	142	141	142	138

Source: SRDS Consumer Market Data, 1961-67. Standard Rate and Data Service, Inc., Skokie, Ill.

Table 11.--Manufacturing plants, by employment size, Appanoose and Monroe Counties, Iowa, 1963

County and type of plant	Number of manufacturing plants:				
		With employment of--			
	Total	1-19	20-49	50-99	100-249
Appanoose:					
Meat slaughtering	1	1			
Prepared animal feeds	1		1		
Bread and related products	1	1			
Bottled and canned soft drinks	1	1			
Canvas products	1	1			
Sawmills and planing mills	1	1			
Nailed wooden boxes and shook	1			1	
Newspaper	2	1	1		
Printing, except lithographic	2	2			
Plastics materials and resins	1	1			
Concrete block and brick	1	1			
Other concrete products	1	1			
Malleable iron foundries	1		1		
Sheet metal work	2	2			
Farm machinery and equipment	1		1		
Industrial furnaces and ovens	1	1			
Miscellaneous machinery	2	2			
Motor vehicles and parts	1	1			
Trailer coaches	1	1			
Miscellaneous products, n.e.c.	1		1		
Total	24	18	5	1	
Monroe:					
Poultry dressing	1		1		
Prepared animal feeds	1	1			
Fabric dress and work gloves	1	1			
Logging camps and contractors	1	1			
Newspaper	1	1			
Hardware, n.e.c.	1	1			
Metal doors, sash and trim	1				1
Administrative and auxiliary	1	1			
Total	8	6	1		1
Area total	32	24	6	1	1

Source: U.S. Census of Manufacturers, 1963. Bureau of the Census.

Table 12.--Retail sales, Iowa rural renewal area and Iowa, 1960-67

Year	Appanoose County	Monroe County	Rural renewal area	Iowa
	1,000 dol.			
1960	16,366	10,685	27,051	3,625,524
1961	15,945	10,098	26,043	3,596,770
1962	16,572	10,808	27,380	3,840,937
1963	17,729	10,875	28,604	3,998,505
1964	16,753	13,005	29,758	3,966,091
1965	17,714	13,395	31,109	4,221,643
1966	19,850	13,575	33,425	4,592,992
1967	20,290	13,943	34,233	4,698,300
	Indexes (1960=100)			
1960	100	100	100	100
1961	97	95	96	99
1962	101	101	101	106
1963	108	102	106	110
1964	102	122	110	109
1965	108	125	115	116
1966	121	127	124	127
1967	124	130	127	130

Source: Sales Management Survey of Buying Power. Sales Management, Inc., New York, 1961-68. Further reproduction is prohibited without permission of the publisher.

Table 13.--Selected retail sales characteristics, Iowa rural renewal area, 1960-67

Item	Unit	1960	1961	1962	1963	1964	1965	1966	1967
Total retail sales	1,000 dol.	27,051	26,043	27,380	28,604	29,758	31,109	33,425	34,233
Selected retail sales:									
Food	do.	6,208	6,232	6,330	6,506	6,660	6,886	7,407	7,463
Percentage of total	Percent	22.9	23.9	23.1	22.7	22.4	22.1	22.2	21.8
Eating and drinking places	1,000 dol.	1,678	1,666	1,724	1,783	1,287	1,362	1,499	1/
Percentage of total	Percent	6.2	6.4	6.3	6.2	4.3	4.4	4.5	--
General merchandise	1,000 dol.	1,779	1,808	1,939	2,051	2,116	2,293	2,614	2,775
Percentage of total	Percent	6.6	6.9	7.1	7.2	7.1	7.4	7.8	8.1
Apparel	1,000 dol.	1,905	1,860	1,916	1,940	1,911	1,934	2,192	1/
Percentage of total	Percent	7.0	7.1	7.0	6.8	6.4	6.2	6.6	--
Furniture, household appliances	1,000 dol.	964	932	946	1,027	1,237	1,263	1,414	1,481
Percentage of total	Percent	3.6	3.6	3.5	3.6	4.2	4.1	4.2	4.3
Automobiles	1,000 dol.	5,475	4,996	5,681	6,056	5,397	5,988	6,101	6,106
Percentage of total	Percent	20.2	19.2	20.7	21.2	18.1	19.2	18.3	17.8
Gas stations	1,000 dol.	2,244	2,230	2,263	2,352	2,836	2,921	3,047	1/
Percentage of total	Percent	8.3	8.6	8.3	8.2	9.5	9.4	9.1	--
Lumber and hardware	1,000 dol.	3,878	3,593	3,745	3,837	3,637	3,765	3,854	1/
Percentage of total	Percent	14.3	13.8	13.7	13.4	12.2	12.1	11.5	--

1/ Data were not available.

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Table 14.--Rural/urban distribution of the population, Iowa rural renewal area, Iowa, and the United States, 1950 and 1960

Area	Urban		Rural nonfarm		Rural farm	
	1950	1960	1950	1960	1950	1960
	Percent					
Rural renewal area...	39.6	42.3	24.3	25.8	36.1	31.9
Appanoose County...	38.7	41.4	30.4	29.7	30.9	28.9
Monroe County.....	41.0	43.8	14.2	19.9	44.8	36.3
Iowa.....	47.7	53.1	22.4	22.9	29.9	24.0
United States.....	64.0	69.9	20.7	22.6	15.3	7.5

Source: U.S. Census of Population, 1950, 1960.

Table 15.--Rural/urban distribution of the population, Iowa rural renewal area and Iowa, 1960-67

Year	Appanoose County	Monroe County	Rural renewal area	Iowa
	Percent			
Percentage of population urban: 1/				
1960	42	43	42	53
1961	42	44	43	53
1962	2/	2/	2/	2/
1963	44	44	44	54
1964	44	45	44	54
1965	44	45	45	55
1966	45	46	45	55
1967	2/	2/	2/	2/
Percentage of population rural nonfarm and farm: 1/				
1960	58	57	58	47
1961	58	56	57	47
1962	2/	2/	2/	2/
1963	56	56	56	46
1964	56	55	56	46
1965	56	55	55	45
1966	55	54	55	45
1967	2/	2/	2/	2/
Percentage of population farm: 3/				
1960	35	48	40	26
1961	33	45	38	24
1962	33	45	38	23
1963	33	45	38	23
1964	33	46	38	23
1965	33	45	38	23
1966	27	40	32	20
1967	26	37	30	18

1/ Source of these data is Sales Management Survey of Buying Power. Sales Management Inc., New York, Copyright 1961-68. Further reproduction is prohibited without permission of the publisher.

2/ Data were not listed in Sales Management Survey of Buying Power. Unpublished data for these years were estimated by the U.S. Department of Agriculture's Economic Research Service to complete the analysis.

3/ Source of these data is SRDS Consumer Market Data, 1961-67. Standard Rate and Data Service, Inc., Skokie, Ill.

Table 16.--Families by 1959 income and by residence, Iowa rural renewal area, 1960

Residence	Total	Under $1,000	$1,000-1,999	$2,000-2,999	$3,000-4,999	$5,000-6,999	$7,000 and over
			Number by income and residence				
Total	7,286	783	1,133	1,136	1,985	1,304	945
Urban	3,037	278	393	439	845	635	447
Rural	4,249	505	740	697	1,140	669	498
Nonfarm	1,832	186	341	305	513	303	184
Farm	2,417	319	399	392	627	366	314
			Percentage distribution by income				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Urban	41.7	35.5	34.7	38.6	42.6	48.7	47.3
Rural	58.3	64.5	65.3	61.4	57.4	51.3	52.7
Nonfarm	25.1	23.8	30.1	26.8	25.8	23.2	19.5
Farm	33.2	40.7	35.2	34.5	31.6	28.1	33.2
			Percentage distribution by residence				
Total	100.0	10.7	15.6	15.6	27.2	17.9	13.0
Urban	100.0	9.2	12.9	14.5	27.8	20.9	14.7
Rural	100.0	11.9	17.4	16.4	26.8	15.7	11.7
Nonfarm	100.0	10.2	18.6	16.6	28.0	16.5	10.0
Farm	100.0	13.2	16.5	16.2	25.9	15.1	13.0
			Percentage distribution by income and residence				
Total	100.0	10.7	15.6	15.6	27.2	17.9	13.0
Urban	41.7	3.8	5.4	6.0	11.6	8.7	6.1
Rural	58.3	6.9	10.2	9.6	15.6	9.2	6.8
Nonfarm	25.1	2.6	4.7	4.2	7.0	4.2	2.5
Farm	33.2	4.4	5.5	5.4	8.6	5.0	4.3

Note: Detail may not add to total because of rounding.

Source: U.S. Census of Population, 1960.

Table 17.--Families by 1959 income and by residence, Iowa, 1960

Residence	Total	Under $1,000	$1,000-1,999	$2,000 2,999	$3,000-4,999	$5,000-6,999	$7,000 and over
			Number by income and residence				
Total.....	912,279	133,314	107,105	95,638	196,910	177,173	202,139
Urban.....	517,269	69,173	52,932	43,341	99,016	112,111	140,696
Rural.....	395,010	64,141	54,173	52,297	97,894	65,062	61,443
Nonfarm..	211,869	33,635	27,746	22,420	51,681	40,206	36,181
Farm.....	183,141	30,506	26,427	29,877	46,213	24,856	25,262
			Percentage distribution by income				
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Urban.....	56.7	51.9	49.4	45.3	50.3	63.3	69.6
Rural.....	43.3	48.1	50.6	54.7	49.7	36.7	30.4
Nonfarm..	23.2	25.2	25.9	23.4	26.2	22.7	17.9
Farm.....	20.1	22.9	24.7	31.2	23.5	14.0	12.5
			Percentage distribution by residence				
Total.....	100.0	14.6	11.7	10.5	21.6	19.4	22.2
Urban.....	100.0	13.4	10.2	8.4	19.1	21.7	27.2
Rural.....	100.0	16.2	13.7	13.2	24.8	16.5	15.6
Nonfarm..	100.0	15.9	13.1	10.6	24.4	19.0	17.1
Farm.....	100.0	16.7	14.4	16.3	25.2	13.6	13.8
			Percentage distribution by income and residence				
Total.....	100.0	14.6	11.7	10.5	21.6	19.4	22.2
Urban.....	56.7	7.6	5.8	4.8	10.9	12.3	15.4
Rural.....	43.3	7.0	5.9	5.7	10.7	7.1	6.7
Nonfarm..	23.2	3.7	3.0	2.5	5.7	4.4	4.0
Farm.....	20.1	3.3	2.9	3.3	5.1	2.7	2.8

Note: Detail may not add to total because of rounding.

Source: U.S. Census of Population, 1960.

Table 18.--Families by 1959 income and by residence, United States, 1960

Residence	Total	Under $1,000	$1,000-1,999	$2,000-2,999	$3,000-4,999	$5,000-6,999	$7,000 and over
	Percentage distribution by income						
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Urban	70.7	47.8	53.3	59.1	65.8	74.2	81.4
Rural	29.2	52.1	46.6	40.8	34.1	25.7	18.5
Nonfarm	21.8	31.7	30.1	27.5	25.8	21.1	15.2
Farm	7.3	20.3	16.5	13.2	8.3	4.5	3.3
	Percentage distribution by residence						
Total	100.0	5.5	7.4	8.3	20.4	23.0	35.1
Urban	100.0	3.7	5.6	6.9	19.0	24.1	40.4
Rural	100.0	9.9	11.9	11.6	23.9	20.2	22.2
Nonfarm	100.0	8.1	10.3	10.5	24.2	22.3	24.5
Farm	100.0	15.3	16.8	14.9	23.0	14.0	15.7
	Percentage distribution by income and residence						
Total	100.0	5.5	7.4	8.3	20.4	23.0	35.1
Urban	70.7	2.6	3.9	4.9	13.4	17.1	28.6
Rural	29.2	2.9	3.4	3.4	6.9	5.9	6.5
Nonfarm	21.8	1.7	2.2	2.3	5.2	4.8	5.3
Farm	7.3	1.1	1.2	1.1	1.7	1.0	1.1

Source: U.S. Census of Population, 1960.

Table 19.--Effective buying income, Iowa rural renewal area and Iowa, 1960-67 1/

Year	Appanoose County	Monroe County	Rural renewal area	Iowa
	1,000 dol.			
1960	21,187	13,430	34,617	5,070,045
1961	22,490	13,540	36,030	5,031,203
1962	23,096	13,931	37,027	5,318,202
1963	24,259	14,249	38,508	5,489,378
1964	26,270	15,254	41,524	5,980,394
1965	27,564	15,921	43,485	6,346,916
1966	31,450	19,552	51,002	7,264,595
1967	33,022	21,125	54,147	7,804,513
	Indexes (1960=100)			
1960	100	100	100	100
1961	106	101	104	99
1962	109	104	107	105
1963	114	106	111	108
1964	124	114	120	118
1965	130	119	126	125
1966	148	146	147	143
1967	156	157	156	154

1/ Personal income after deductions of tax and nontax liabilities to Federal, State and local governments.

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Table 20.--Effective buying income per capita, Iowa rural renewal area and Iowa, 1960-67

Year	Appanoose County	Monroe County	Rural renewal area	Iowa
	Dollars			
1960	1,341	1,291	1,321	1,833
1961	1,460	1,327	1,407	1,806
1962	1,540	1,393	1,483	1,898
1963	1,617	1,439	1,547	1,960
1964	1,728	1,557	1,661	2,122
1965	1,850	1,641	1,768	2,250
1966	2,029	2,037	2,032	2,582
1967	2,172	2,224	2,192	2,779
	Indexes (1960=100)			
1960	100	100	100	100
1961	109	103	107	99
1962	115	109	112	104
1963	121	111	117	107
1964	129	121	126	116
1965	138	127	134	123
1966	151	158	154	141
1967	162	172	166	152

Source: Table 19 and Sales Management Survey of Buying Power. Sales Management, Inc., New York, Copyright 1961-68. Further reproduction is prohibited without permission of the publisher.

Table 21.--Effective buying income per household, Iowa rural renewal area and Iowa, 1960-67

Year	Appanoose County	Monroe County	Rural renewal area	Iowa
	Dollars			
1960	3,998	4,631	4,222	5,970
1961	4,165	4,231	4,190	5,920
1962	4,358	4,494	4,408	6,224
1963	4,665	4,596	4,640	6,425
1964	4,865	4,921	4,885	6,956
1965	5,301	5,136	5,239	7,355
1966	5,824	6,307	6,000	8,416
1967	6,231	6,815	6,446	9,022
	Indexes (1960=100)			
1960	100	100	100	100
1961	104	91	99	99
1962	109	97	104	104
1963	117	99	110	108
1964	122	106	116	117
1965	133	111	124	123
1966	146	136	142	141
1967	156	147	153	151

Source: Tables 2 and 19.

Table 22.--Personal income by major sources and earnings by broad industrial sector, Appanoose County, Iowa, selected years, 1929-67

Item	1929	1940	1950	1959	1962	1965	1966	1967
	1,000 dol.							
Total personal income	9,060	6,901	17,444	20,492	23,938	27,256	31,733	34,083
Total wage and salary disbursements	3,979	2,951	6,421	7,792	9,141	10,582	12,630	14,906
Other labor income	48	35	180	299	365	450	575	813
Proprietors income	3,733	2,505	7,436	6,927	7,861	8,520	9,758	8,379
Property income	1,014	633	1,593	2,645	3,311	4,627	4,976	5,646
Transfer payments	301	822	1,988	3,247	3,765	3,694	4,573	5,394
Less personal contributions for social insurance	15	45	174	418	505	617	779	1,055
Total earnings	7,760	5,491	14,037	15,018	17,367	19,552	22,963	24,098
Farm earnings	2,319	1,546	5,136	3,338	4,126	4,284	5,399	3,912
Total nonfarm earnings	5,441	3,945	8,901	11,680	13,241	15,268	17,564	20,186
Government earnings	653	1,082	1,611	2,204	2,833	3,427	3,786	4,137
Total Federal	131	566	375	613	763	1,082	1,217	1,260
Federal civilian	127	560	269	498	646	966	1,082	1,115
Military	4	6	106	115	117	116	135	145
State and local	522	516	1,236	1,591	2,070	2,345	2,569	2,877
Private nonfarm earnings	4,788	2,863	7,290	9,476	10,408	11,841	13,778	16,049
Manufacturing	297	142	756	1,261	1,412	2,229	2,640	5,008
Mining	1,147	616	1,076	771	695	615	482	458
Contract construction	223	79	488	952	1,076	1,353	1,857	1,332
Transportation and other public utilities	1,108	578	1,276	1,314	1,541	1,121	1,743	1,874
Wholesale and retail trade	1,075	816	2,363	2,834	2,976	3,398	3,598	3,681
Finance, insurance and real estate	136	65	171	368	414	447	479	486
Services	772	545	1,076	1,830	2,102	2,448	2,695	2,931
Other	30	22	84	146	192	230	284	279

Source: U.S. Dept. of Commerce, Regional Economics Division, Office of Business Economics.

Table 23.--Personal income by major sources and earnings by broad industrial sector, Monroe County, Iowa, selected years, 1929-1967

Item	1929	1940	1950	1959	1962	1965	1966	1967
	1,000 dol.							
Total personal income	5,370	4,144	10,774	12,652	14,401	16,824	18,549	17,958
Total wage and salary disbursements	1,705	1,513	3,013	4,996	5,490	6,768	7,486	7,400
Other labor income	19	13	68	186	200	261	300	278
Proprietors income	3,172	1,776	5,230	4,044	4,519	4,585	5,199	4,059
Property income	307	392	1,201	1,801	2,254	3,149	3,387	3,685
Transfer payments	177	471	1,374	1,866	2,222	2,413	2,590	3,015
Less personal contributions for social insurance	10	21	112	241	284	352	413	479
Total earnings	4,896	3,302	8,311	9,226	10,209	11,614	12,985	11,737
Farm earnings	2,521	1,403	4,185	2,284	2,604	2,410	2,972	1,842
Total nonfarm earnings	2,375	1,899	4,126	6,942	7,605	9,204	10,013	9,895
Government earnings	410	870	1,073	1,969	2,543	3,072	3,388	3,731
Total Federal	107	555	205	443	565	593	687	707
Federal civilian	104	551	160	383	504	533	618	636
Military	3	4	45	60	61	60	69	71
State and local	303	315	868	1,526	1,978	2,479	2,701	3,024
Private nonfarm earnings	1,965	1,029	3,053	4,973	5,062	6,132	6,625	6,164
Manufacturing	54	18	195	1,465	1,054	1,636	1,517	970
Mining	272	103	235	125	91	84	84	70
Contract construction	77	27	171	294	281	443	381	424
Transportation and other public utilities	423	195	728	518	752	559	962	1,026
Wholesale and retail trade	508	362	1,162	1,523	1,587	1,715	1,822	1,809
Finance, insurance and real estate	66	36	76	170	189	227	246	266
Services	556	283	436	816	977	1,182	1,275	1,261
Other	9	5	50	62	131	286	338	338

Source: U.S. Dept. of Commerce, Regional Economics Division, Office of Business Economics.

Table 24.--Total bank deposits, Iowa rural renewal area and Iowa, 1960-67

Year	Appanoose County	Monroe County	Rural renewal area	Iowa
	1,000 dol.			
1960	12,815	6,976	19,791	2,946,479
1961	1/	1/	1/	1/
1962	14,363	7,334	21,697	3,239,518
1963	1/	1/	1/	1/
1964	16,835	8,401	25,236	3,705,262
1965	1/	1/	1/	1/
1966	20,327	10,417	30,744	4,553,862
1967	1/	1/	1/	1/
	Indexes (1960=100)			
1960	100	100	100	100
1961	106	103	105	105
1962	112	105	110	110
1963	122	113	119	118
1964	131	120	128	126
1965	157	135	149	140
1966	159	149	155	155
1967	171	169	170	168

1/ Data were not available. Unpublished data for these years were estimated by the U.S. Department of Agriculture's Economic Research Service to complete the analysis.

Source: For 1960, 1962, and 1964, Distribution of Bank Deposits by Counties and Standard Metropolitan Areas (as of June 30). Board of Governors of the Federal Reserve System, Washington. For 1966, National Summary of Accounts and Deposits in All Commercial Banks, June 30, 1966. Federal Deposit Insurance Corporation, Washington.

Table 25.--Per capita bank deposits, Iowa rural renewal area and Iowa, 1960-67

Year	Appanoose County	Monroe County	Rural renewal area	Iowa
	Dollars			
1960	811	671	755	1,065
1961	1/	1/	1/	1/
1962	958	733	868	1,156
1963	1/	1/	1/	1/
1964	1,108	857	1,009	1,315
1965	1/	1/	1/	1/
1966	1,311	1,085	1,225	1,619
1967	1/	1/	1/	1/
	Indexes (1960=100)			
1960	100	100	100	100
1961	109	105	107	104
1962	118	109	115	109
1963	128	118	125	117
1964	137	128	134	123
1965	166	145	159	137
1966	162	162	162	152
1967	177	185	180	166

1/ Data were not available. Unpublished data for these years were estimated by the U.S. Department of Agriculture's Economic Research Service to complete the analysis.

Source: Table 24 and Sales Management Survey of Buying Power. Sales Management, Inc., New York, Copyright 1961-68. Further reproduction is prohibited without permission of the publisher.

Table 26.--Selected housing characteristics, Iowa rural renewal area and Iowa, 1960

Item	Appanoose County		Monroe County		Rural renewal area		Iowa	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Condition of housing: 1/								
All housing units	6,391	100.0	3,599	100.0	9,990	100.0	905,267	100.0
Sound	4,002	62.6	2,336	64.9	6,338	63.5	718,879	79.4
Deteriorating	1,898	29.7	1,090	30.3	2,988	29.9	150,689	16.7
Dilapidated	491	7.7	173	4.8	664	6.6	35,699	3.9
Rural housing units: 2/	3,796	100.0	1,941	100.0	5,737	100.0	424,096	100.0
Sound	2,078	54.7	1,059	54.6	3,137	54.7	322,462	76.0
Deteriorating	1,328	36.0	775	39.9	2,103	36.7	83,017	19.6
Dilapidated	390	10.2	107	5.5	497	8.6	18,617	4.4
Plumbing facilities: 3/								
All housing units; 4/	5,900	100.0	3,426	100.0	9,326	100.0	869,568	100.0
With all facilities	3,291	55.8	2,031	59.3	5,322	57.1	715,384	82.3
Lacking some or all facilities	2,609	44.2	1,395	40.7	4,004	42.9	154,184	17.7
Rural housing units: 4/	3,406	100.0	1,834	100.0	5,240	100.0	405,479	100.0
With all facilities	1,380	40.5	822	44.8	2,202	42.0	300,448	74.1
Lacking some or all facilities	2,026	59.5	1,012	55.2	3,038	58.0	105,031	25.9

1/ Sound housing has no defects or only slight defects which can usually be corrected by regular maintenance. Deteriorating housing needs more repair than regular maintenance will provide if the unit is to continue to provide safe and adequate shelter. Dilapidated housing does not provide safe and adequate shelter and endangers the health, safety, or well-being of the occupants.

2/ Includes all rural nonfarm and occupied farm housing units.

3/ A housing unit with all plumbing facilities has piped hot and cold water, flush toilet, and bathtub or shower inside the structure. A unit "lacking some or all facilities" lacks one or more of these facilities.

4/ Includes only sound and deteriorating housing units.

Source: U.S. Census of Housing, 1960. Bureau of the Census.

Table 27.--Source of water supply for housing, Iowa rural renewal area and Iowa, 1960

Item	Appanoose County		Monroe County		Rural renewal area		Iowa 1/	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All housing units	6,391	100.0	3,599	100.0	9,990	100.0	706,819	100.0
Public system or private company	2,520	39.4	1,796	49.9	4,316	43.2	420,771	59.5
Individual well	3,663	57.3	1,650	45.8	5,313	53.2	274,219	38.8
Other 2/	208	3.3	153	4.3	361	3.6	11,829	1.7
Rural housing units	3,796	100.0	1,941	100.0	5,737	100.0	424,096	100.0
Public system or private company	180	4.7	201	10.3	381	6.6	3/	--
Individual well	3,445	90.8	1,587	81.8	5,032	87.7	3/	--
Other	171	4.5	153	7.9	324	5.6	3/	--

1/ Excludes housing units in places of 50,000 or more inhabitants.
2/ Water taken from springs, creeks, rivers, ponds, lakes, and all other sources.
3/ Data were not available.

Source: U.S. Census of Housing, 1960. Bureau of the Census.

Table 28.--Sewage disposal for housing, Iowa rural renewal area and Iowa, 1960

Item	Appanoose County		Monroe County		Rural renewal area		Iowa 1/	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All housing units...	6,391	100.0	3,599	100.0	9,990	100.0	706,819	100.0
Public sewer.....	2,408	37.7	1,407	39.1	3,815	38.2	363,457	51.4
Septic tank or cesspool.....	1,311	20.5	917	25.5	2,228	22.3	235,634	33.3
Other or none.....	2,672	41.8	1,275	35.4	3,947	39.5	107,728	15.2
Rural housing units.	3,796	100.0	1,941	100.0	5,737	100.0	424,096	100.0
Public sewer.....	206	5.4	20	1.0	226	3.9	2/	--
Septic tank or cesspool.....	1,221	32.2	779	40.1	2,000	34.9	2/	--
Other or none.....	2,369	62.4	1,142	58.8	3,511	61.2	2/	--

1/ Excludes housing units in places of 50,000 or more inhabitants. 2/ Data were not available.

Source: U.S. Census of Housing, 1960. Bureau of the Census.

Table 29.--Population per physician, 1967, and population per dentist, 1966, Iowa rural renewal area and Iowa

Area	Population per physician, 1967	Population per dentist, 1966
	Number	Number
Appanoose County	1,275	3,040
Monroe County	3,200	1,960
Similar counties in U.S. 1/	2,282	2/3,600
Iowa	1,096	1,799

1/ Nonmetropolitan counties with under 10,000 inhabitants.
2/ Data for 1963.

Sources: The Distribution of Physicians, Hospitals, and Hospital Beds in the United States, 1967. American Medical Association, Chicago, 1968; Distribution of Dentists in the United States by State, Region, District, and County, 1966. American Dental Association, Chicago, 1967; Location of Manpower in Eight Occupations, Health Manpower Source Book, Sec. 19. U.S. Dept. of Health, Educ., and Welfare, Pub. Health Serv., Wash., D.C., 1955.

Table 30.--Distribution of total direct general expenditures by local governments, Iowa rural renewal area and Iowa, 1962

Item	Appanoose County		Monroe County		Rural renewal area		Iowa 1/	
	1,000 dollars	Percent	1,000 dollars	Percent	1,000 dollars	Percent	1,000 dollars	Percent
Education	1,366	52.3	708	36.5	2,074	45.6	282,088	49.8
Highways	554	21.2	522	26.9	1,076	23.6	104,144	18.4
Public welfare	152	5.8	98	5.1	250	5.5	16,454	2.9
Police and fire-protection	89	3.4	56	2.9	145	3.2	25,518	4.5
Sewage and other sanitation	21	0.8	8	0.4	29	0.6	26,630	4.7
Parks, recreation, and natural resources	47	1.8	32	1.6	79	1.7	17,011	3.0
Libraries	18	0.7	0	0	18	0.4	4,522	0.8
Other 2/	366	14.0	517	26.6	883	19.4	89,806	15.9
Total 3/	2,614	100.0	1,940	100.0	4,554	100.0	566,173	100.0

1/ Does not include expenditures by the State Government.
2/ Includes expenditures for financial administration, general control, public buildings, interest on debt, and other.
3/ Detail may not add to total because of rounding.

Source: U.S. Census of Governments, 1962. Bureau of the Census.

Table 31.--Distribution of per capita direct general expenditures by local governments, Iowa rural renewal area and Iowa, 1962 1/

Item	Appanoose County	Monroe County	Rural renewal area	Iowa
	Dollars			
Education	91	71	83	101
Highways	37	52	43	37
Public welfare	10	10	10	6
Police and fire protection	6	6	6	9
Sewage and other sanitation	1	2/	1	10
Parks, recreation and natural resources	3	3	3	6
Libraries	1	0	2/	2
Other 3/	24	52	35	32
Total	174	194	182	202

1/ Population numbers used in computing per capita expenditures taken from Sales Management Survey of Buying Power. Sales Management Inc., New York, 1963.
2/ Less than $1.
3/ Includes expenditures for financial administration, general control, public buildings, interest on debt, and other.

Table 32.--Total and per capita retail sales tax paid, Iowa rural renewal area and Iowa, 1960-67

Year	Appanoose County	Monore County	Rural renewal area	Iowa
			Dollars	
Total retail sales tax paid:				
1960	311,663	178,066	489,729	69,087,895
1961	307,056	179,945	487,001	69,560,684
1962	298,831	172,828	471,659	70,034,013
1963	310,785	182,992	493,777	72,859,502
1964	328,851	189,856	518,707	74,282,286
1965	340,034	191,519	531,553	77,431,573
1966	377,638	203,859	581,497	85,963,261
1967	424,932	213,734	638,666	92,502,788
Per capita retail sales tax paid:				
1960	19.73	17.12	18.69	24.97
1961	19.94	17.64	19.02	24.98
1962	19.92	17.28	18.87	25.00
1963	20.72	18.48	19.83	26.02
1964	21.63	19.37	20.75	26.36
1965	22.82	19.74	21.61	27.45
1966	24.36	21.23	23.17	30.55
1967	27.96	22.50	25.86	32.94

Source: Research and Statistics Division, State of Iowa Department of Revenue, Des Moines, Iowa; and Sales Management Survey of Buying Power. Sales Management, Inc., New York, Copyright 1961-68. Further reproduction is prohibited without permission of the publisher.

Table 33.--Total and per capita State income tax paid, Iowa rural renewal area and Iowa, 1960-67

Year	Appanoose County	Monroe County	Rural renewal area	Iowa
		Dollars		
Total State income tax paid:				
1960	108,179	68,084	176,263	34,463,226
1961	105,498	71,234	176,732	35,659,934
1962	115,202	70,577	185,779	39,306,828
1963	125,767	82,385	208,152	42,193,610
1964	140,741	87,453	228,194	43,827,005
1965	170,966	109,378	280,344	54,642,556
1966	212,820	143,293	356,113	67,669,955
1967	275,971	166,275	442,246	81,293,895
Per capita State income tax paid:				
1960	6.84	6.54	6.73	12.46
1961	6.85	6.96	6.90	12.80
1962	7.68	7.06	7.43	14.03
1963	8.38	8.32	8.36	15.07
1964	9.26	8.92	9.13	15.55
1965	11.47	11.28	11.40	19.37
1966	13.73	14.93	14.19	24.05
1967	18.15	17.51	17.90	28.95

Source: Research and Statistics Division, State of Iowa Department of Revenue, Des Moines, Iowa and Sales Management Survey of Buying Power. Sales Management, Inc., New York, Copyright 1961-68. Further reproduction is prohibited without permission of the publisher.

Table 34.--Total and per capita use tax paid, Iowa rural renewal area and Iowa, 1960-67

Year	Appanoose County	Monroe County	Rural renewal area	Iowa
		Dollars		
Total use tax paid:				
1960	11,412	451	11,863	1,867,835
1961	11,448	695	12,143	3,947,809
1962	14,712	815	15,527	2,508,472
1963	9,696	803	10,499	2,323,717
1964	11,310	992	12,302	2,423,533
1965	20,903	1,036	21,939	2,403,053
1966	16,881	917	17,798	2,757,364
1967	14,028	715	14,743	3,098,736
Per capita use tax paid:				
1960	.72	.04	.45	.68
1961	.74	.07	.47	1.42
1962	.98	.08	.62	.90
1963	.65	.08	.42	.83
1964	.74	.10	.49	.86
1965	1.40	.11	.89	.85
1966	1.09	.10	.70	.98
1967	.92	.08	.60	1.10

Source: Research and Statistics Division, State of Iowa Department of Revenue, Des Moines, Iowa and Sales Management Survey of Buying Power. Sales Management Inc., New York, Copyright 1961-68. Further reproduction is prohibited without permission of the publisher.

Table 35.--Level of economic activity per capita, selected variables, Iowa rural renewal area, 1960-67

Item	Unit	Weight	Per capita							
			1960	1961	1962	1963	1964	1965	1966	1967
Households	Number	34.86	.31	.34	.34	.33	.34	.34	.34	.34
Urban population	Persons	10.78	.42	.43	.44	.44	.44	.45	.45	.46
Farm population	do.	-18.58	.40	.38	.38	.38	.38	.38	.32	.30
Effective buying income	1,000 dol.	12.97	1.32	1.41	1.48	1.55	1.66	1.77	2.03	2.19
Gross farm income 1/	do.	1.33	1.50	1.72	1.82	1.75	1.74	2.11	2.72	3.04
Bank deposits	do.	9.51	.76	.81	.87	.94	1.01	1.20	1.22	1.36
Retail sales	do.	13.31	1.03	1.02	1.10	1.15	1.19	1.26	1.33	1.39
State income taxes paid	Dollar	.95	6.73	6.90	7.43	8.36	9.13	11.40	14.19	17.90
Retail sales taxes paid	do.	.68	18.69	19.02	18.87	19.83	20.75	21.61	23.17	25.86
Use taxes paid	do.	4.70	.45	.47	.62	.42	.49	.89	.70	.60

1/ Per farm population.

Table 36.--Level of economic activity per capita, selected variables, Iowa, 1960-67

Item	Unit	Weight	Per capita							
			1960	1961	1962	1963	1964	1965	1966	1967
Households	Number	34.86	.31	.31	.31	.31	.31	.31	.31	.31
Urban population	Persons	10.78	.53	.53	.57	.54	.54	.55	.55	.56
Farm population	do.	-18.58	.26	.24	.23	.23	.23	.23	.20	.18
Effective buying income	1,000 dol.	12.97	1.83	1.81	1.90	1.96	2.12	2.25	2.58	2.78
Gross farm income 1/	do.	1.33	3.75	4.21	4.43	4.26	4.26	5.14	6.63	7.49
Bank deposits	do.	9.51	1.07	1.11	1.16	1.24	1.31	1.46	1.62	1.78
Retail sales	do.	13.31	1.31	1.29	1.37	1.43	1.41	1.50	1.63	1.67
State income taxes paid	Dollars	.95	12.46	12.80	14.03	15.07	15.55	19.37	24.05	28.95
Retail sales taxes paid	do.	.68	24.97	24.98	25.00	26.02	26.36	27.45	30.55	32.94
Use taxes paid	do.	4.70	.68	1.42	.90	.83	.86	.85	.98	1.10

1/ Per farm population.

Table 37.--Indexes of economic activity, Iowa rural renewal area and Iowa, 1960-67

Year	Rural renewal area		Iowa	
	Per capita	Total	Per capita	Total
1960	69.3	69.3	100.0	100.0
1961	72.9	71.5	104.7	105.7
1962	76.8	73.0	106.8	107.9
1963	79.3	75.3	110.0	111.1
1964	84.1	79.9	113.5	115.8
1965	93.4	87.8	123.5	126.0
1966	102.8	98.7	140.9	143.7
1967	112.7	105.9	154.0	157.0

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